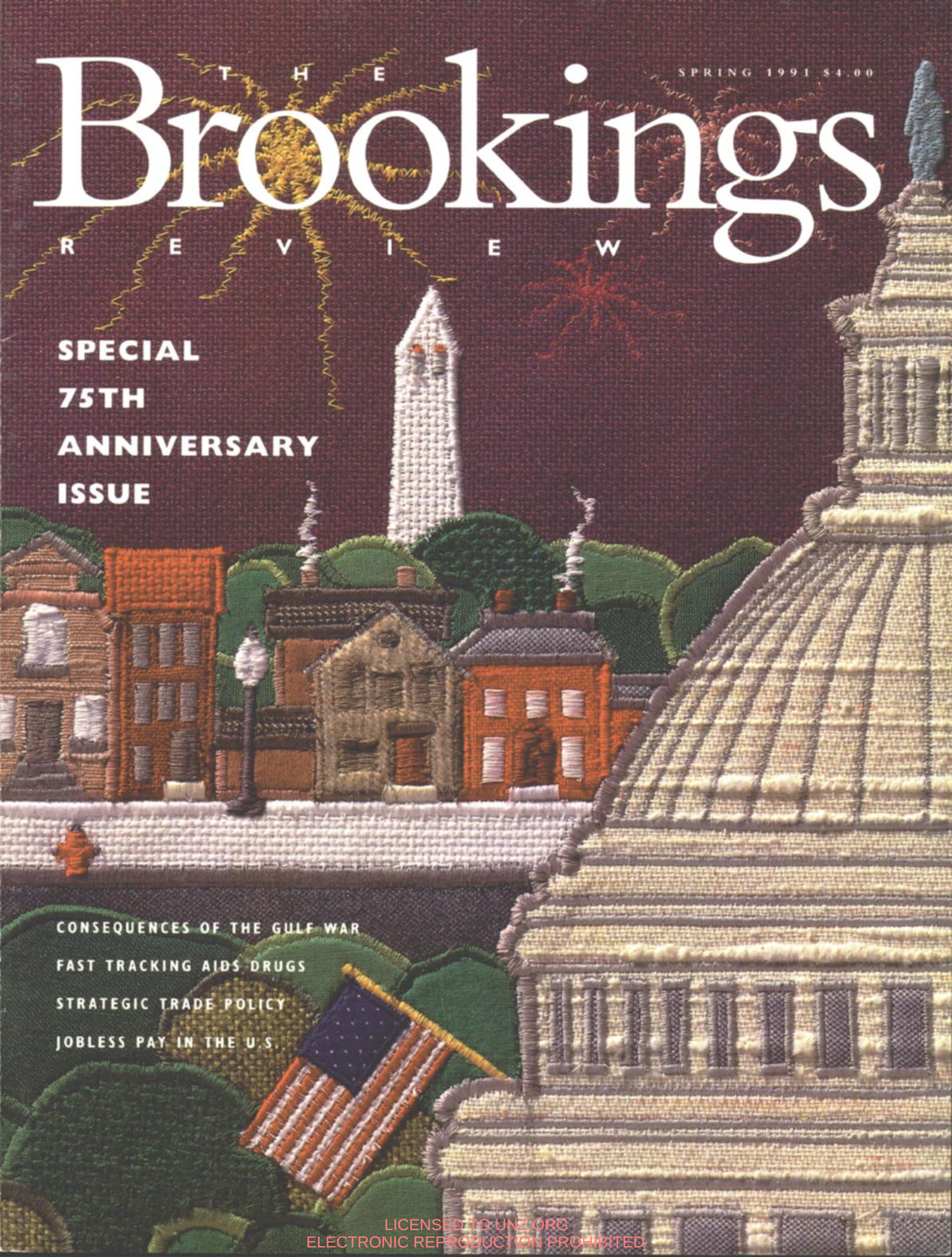


THE Brookings REVIEW



SPRING 1991 \$4.00

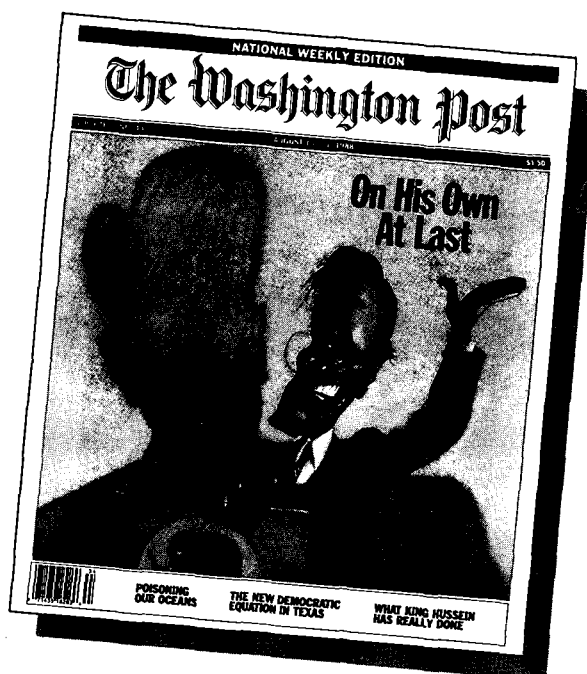
**SPECIAL
75TH
ANNIVERSARY
ISSUE**

CONSEQUENCES OF THE GULF WAR
FAST TRACKING AIDS DRUGS
STRATEGIC TRADE POLICY
JOBLESS PAY IN THE U.S.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Washington Post "is the first and prime source of information for the national government, its President, its Congress and its judges. And for hundreds of foreign governments. . . It can come very close to setting the nation's agenda."

—Roger Mudd,
The McNeil/Lehrer News Hour



Now read the same reports that are informing the President, The Congress and foreign governments this morning with a subscription to The Washington Post National Weekly.

The Washington Post's tabloid-sized weekly of the most compelling coverage of the American political drama is just \$48 for 52 issues or \$26 for 26 issues.

Subscribe today by mailing the coupon below.

The Washington Post NATIONAL WEEKLY EDITION

☐ YES! Send me 52 issues of The Washington Post National Weekly Edition for \$48.00

☐ I prefer 26 issues for \$26.00

☐ Please bill me later. ☐ Payment Enclosed.

Mail To: The Washington Post
National Weekly Edition
P.O. Box 11331
Des Moines, Iowa 50340-1331

Name _____

Address _____ Apt. _____

City _____ State _____ Zip _____

Allow 4-6 weeks for shipment of your first issue. Offer good in U.S. and possessions.

J77T02

THE Brookings REVIEW

SPRING 1991 VOL. 9 NO. 2

6 THE CONSEQUENCES OF THE GULF WAR

Forging the new world order under a forced schedule

John D. Steinbruner

14 MORE LIKE THEM?

The political feasibility of strategic trade policy

Pietro S. Nivola

22 MAKING NEW RULES

High-tech trade friction and the semiconductor industry

Kenneth Flamm

30 THE FAST TRACK

Federal agencies and the political demand for AIDS drugs

Christopher H. Foreman, Jr.

38 THE TATTERED SAFETY NET

Jobless pay in the United States

Gary Burtless

42 BUILDING BRIDGES

Courts, Congress, and guidelines for communications

Robert Katzmann

Letters 3

A Considered Opinion

Some Thoughts on Turning 75

Bruce K. MacLaury 5

World Watch

Patriot: Savior of the SDI?

Janne E. Nolan 50

Economy Watch

The Anomalous Recession

George L. Perry 51

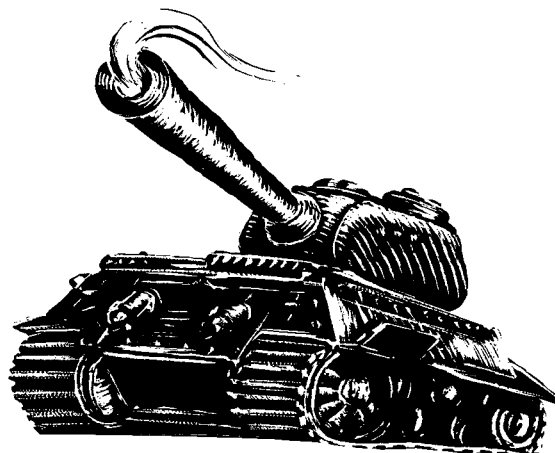
Politics Watch

The Home Front

Edwin Dorn 52



14



COVER ILLUSTRATION
BY JERRY PAVEY

The Brookings Institution is an independent, nonprofit organization devoted to nonpartisan research, education, and publication in economics, government, foreign policy, and the social sciences generally. Its principal purposes are to aid in the development of sound public policies and to promote public understanding of issues of national importance.

■ The Institution was founded on December 8, 1927, to merge the

activities of the Institute for Government Research, founded in 1916, the Institute of Economics, founded in 1922, and the Robert Brookings Graduate School of Economics, founded in 1924.

■ The Board of Trustees is responsible for the general administration of the Institution, while the immediate direction of the policies, program, and staff is vested in the President, assisted by an advisory committee of the officers and staff.

The by-laws of the Institution state: "It is the function of the Trustees to make possible the conduct of scientific research, and publication, under the most favorable conditions, and to safeguard the independence of the research staff in the pursuit of their studies and in the publication of the results of such studies. It is not a part of their function to determine, control, or influence the conduct of particular investigations or the

conclusions reached."

■ The officers and staff conduct a continual review of the Institution's fields of interest. Subjects are selected for study on the basis of their significance and timeliness, the adequacy of information and techniques of investigation, the availability of personnel and funds, and the relationship of the projects to the Institution's objectives. Each Brookings study is offered as a comprehensive scholarly treatment

of a subject worthy of public consideration.

■ The Institution maintains its position of neutrality on issues of public policy to safeguard the intellectual freedom of the staff. Interpretations or conclusions in Brookings publications should be understood to be solely those of the authors and should not be attributed to the Institution, its trustees, officers, or other staff members, or to the organizations that support its research.

Board of Trustees

Louis W. Cabot
Chairman

Ralph S. Saul
Vice Chairman

Ronald J. Arnault
Elizabeth E. Bailey
Rex J. Bates
Yvonne Brathwaite Burke
A. W. Clausen
William T. Coleman, Jr.
Kenneth W. Dam
D. Ronald Daniel
Charles W. Duncan, Jr.
Walter Y. Elisha
Robert F. Erburu
Stephen Friedman
Robert D. Haas
Pamela C. Harriman
Vernon E. Jordan, Jr.
James A. Joseph
Nannerl O. Keohane

Martin J. Koldyke
Thomas G. Labrecque
Bruce K. MacLaury
Donald F. McHenry
Samuel Pizar
James D. Robinson III
David Rockefeller, Jr.
Howard D. Samuel
B. Francis Saul II
Henry B. Schacht
Donna E. Shalala
Robert H. Smith
Howard R. Swearer
Morris Tanenbaum
John C. Whitehead
Ezra K. Zilkha

Honorary Trustees

Vincent M. Barnett, Jr.
Barton M. Biggs
Robert D. Calkins
Edward W. Carter
Frank T. Cary
Lloyd N. Cutler
Bruce B. Dayton
Douglas Dillon
Huntington Harris
Andrew Heiskell
Roger W. Heyns
John E. Lockwood
James T. Lynn
William McC. Martin, Jr.
Robert S. McNamara

Mary Patterson McPherson
Arjay Miller
Donald S. Perkins
J. Woodward Redmond
Charles W. Robinson
Robert V. Roosa
Gerard C. Smith
Robert Brookings Smith
Sydney Stein, Jr.
Phyllis A. Wallace
James D. Wolfensohn

President

Bruce K. MacLaury

Vice President External Affairs

John M. Hills

Director of Publications

Robert L. Faherty

The Brookings Review

Editor

Brenda Szittyá

Production Staff

Norman Turpin
Susan F. Woollen

Circulation

Kate O'Connor
Ann M. Lofton

Marketing

Peggy Jarvis Ferrin
Jill B. Bernstein
Elizabeth A. Benevides

Subscription rates:

one year \$15 (\$20 foreign);
two years \$27 (\$37 foreign).

Postmaster, send address
changes to:

The Brookings Review,
1775 Massachusetts Ave.,
N.W., Washington, D.C.
20036

Circulation queries:

(202) 797-6255

U.S. newsstand
distribution by:

Ingram Periodicals Inc.
347 Reedwood Drive,
Nashville, Tenn. 37217

The Brookings Review
(ISSN 0745-1253)
is published quarterly by:

The Brookings Institution,
1775 Massachusetts Ave.,
N.W., Washington, D.C.
20036.

Copyright © 1991 by
the Brookings Institution.
All rights reserved.

Second-class postage paid at
Washington, D.C.
USPS I.D. No. 14209;
Publication No. 551640.

Design and art direction by:
Meadows & Wiser,
Washington, D.C.

No New Gasoline Tax This Year

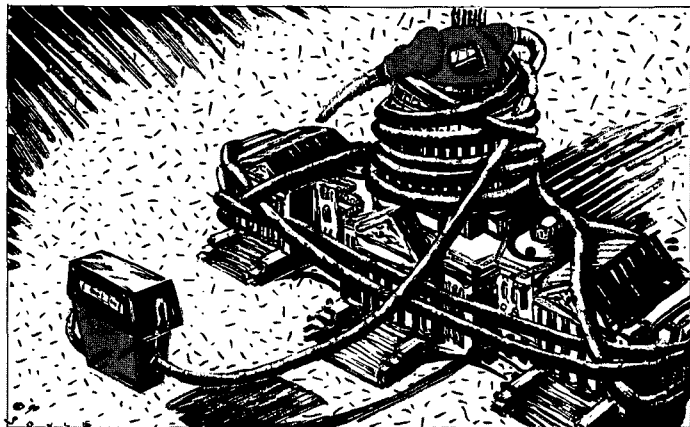


ILLUSTRATION BY BOB SOULE

Energy conservation is good public policy, but editorialists who are again calling for higher energy consumption taxes would be well advised to review Pietro Nivola's "Déjà Vu All Over Again: Revisiting the Politics of Gasoline Taxation" (winter issue) for a healthy dose of political reality.

Consumption disincentives make sense. In each of the oil crunches, higher prices have caused real energy conservation. Higher gas taxes would have the same effect.

But what seems, inside the Beltway, to be a wonderful policy invariably runs into trouble outside. Nivola notes that the last two modest increases barely survived even though they were leadership recommendations propelled by crises.

Last year's Budget Summiteers, in the splendid isolation of Andrews Air Force Base, also concluded that higher energy taxes were a reasonable part of the budget compromise. Unable to find a broad energy tax that was administrable, they chose a 9.5 cent gas tax hike.

The defeat of the budget compromise proposal in the House was political reality. It was caused partly by liberals upset by Medicare cuts and the rich-poor dialogue, and partly by conservatives upset by the amount of taxes. It was also caused by the

gas tax. Conservatives and liberals coalesced in their objection to it.

One may ponder why Americans raised feeble objections to a 25-cents-a-gallon price increase for Saddam Hussein's disruption in August but arose in strenuous objection to a dime-a-gallon tax a month later. As Nivola observes, the whys are complex, but the whethers are simple.

In normal times, the public and its representatives will not stand for new gas taxes. In times of crisis, "modest headway" is grudgingly accepted. This year, despite calls for energy conservation, there will be no new gas taxes.

*Bill Frenzel,
Brookings Guest Scholar and
former Congressman*

Greed, Not Need, Drove Saddam Hussein

Yahya Sadowski has some powerful insights into the dilemmas facing the Arab world ("Revolution, Reform, or Regression? Arab Political Options in the 1990 Gulf Crisis," winter issue). However, he has exaggerated Iraq's economic problems and underestimated the aggressiveness of its ruler.

Sadowski writes as if Iraq were one of the poorer Arab nations, which is hardly the case. Its per capita income ranks well above average for the Arab

League. Furthermore, its economic problems are of its own doing, not due to the low level of per capita resources that plagues countries like Egypt or Yemen. Iraq has the second largest oil reserves in the world, which have been developed slowly only because of Baathist stubborn opposition to working with international oil companies. Iraq is blessed with land so rich it was called the Fertile Crescent. For three thousand years Iraq exported food, until the land reform of 1957 and other inappropriate policies made Iraq into a food importer. Iraq grows less food today than it did in 1957, a record more catastrophic than that of any country except two or three in Africa. The real contrast between Iraq and the Gulf is between competence and incompetence, not between oil-rich and resource-poor.

Iraq was not facing a pressing economic crisis in 1990 before its invasion of Kuwait. Imports into Iraq in the first half of the year were \$9.7 billion, at least 50 percent above the 1989 level, according to the Iraqi Trade Ministry. Iraq paid \$3.4 billion on its debt in the first quarter of 1990, more than in all of 1989. The invasion of Kuwait was motivated not by dire need, but by greed on a gargantuan scale. Saddam Hussein had ordered his ministers to proceed as rapidly as they could on projects that would have cost about \$30 billion to \$50 billion, including thousands of miles of expressways and railroads, new airports, steel plants, and other boondoggles. His love for Stalinist-style heavy investments, inappropriate for Iraq, and his unwillingness to recognize the limits on his country's resources are what led Saddam to covet Kuwait's resources.

The massive projects he had in mind, plus the sophisticated weapons systems he was devel-

oping, suggest that Saddam's goal was to dominate the region. At the least, the evidence suggests reason for worry on the part of his neighbors, and worry they did, as evidenced by the rush in 1988 and 1989 to sign nonaggression pacts with Iraq. Sadowski would do well to note that Saddam may be aiming at a new state system, in which it is the preeminent Arab power. Iraq's goal was not necessarily what Sadowski ascribes to it, namely, keeping alive what he calls the old Arab state system, in which the Gulf monarchies offered aid to the poorer Arab nationalist regimes.

*Patrick Clawson,
Foreign Policy Research
Institute*

What to Do about Those Falling Earnings?

In the winter issue, McKinley Blackburn, David Bloom, and Richard Freeman ("An Era of Falling Earnings and Rising Inequality") provide a lively and thoughtful version of their research results on the changing level and distribution of wages in the United States. Many of us in the academic community have of course followed their studies closely for four years. As an early exponent of the thesis of widening wage differentials, not attributable simply to changes on the supply side of the labor market, I was understandably gratified by their conclusions. I agree with them that inequality is growing, and that the "situation is serious." I especially appreciated their balanced, nuanced discussion of probable causes of both secular stagnation in average wages and the increasing polarization in the distribution. It would, I think, be fair to say—apart from a small number of stubborn hold-outs in certain research institutes, magazines, and newspapers—this now constitutes a consensus view by the

community of labor researchers.

I do want to raise briefly a few qualifications about some of the claims made by Blackburn, Bloom, and Freeman. For one thing, while the text does not call attention to the fact, the authors chose to restrict their analysis to full-time, year-round (YRFT) employees. There are good, sensible methodological reasons for doing so. Indeed, in my own work with Barry Bluestone, I employed the same restriction. But we should all be aware that this methodological choice surely understates our estimates of aggregate earnings decline, since (from the research of Ronald Ehrenberg and others) we know that education-adjusted hourly wage rates are definitely correlated with work experience. Moreover, to the extent that the unusually severe displacement of the late 1970s and early 1980s forced disproportionate numbers of older, experienced blue collar workers into part-time or part-year employment, the exclusion of such employees from the sample surely accounts for some part of the authors' finding that the decline in average wages was concentrated mainly among younger workers (aged 25–34).

Nor does the conclusion that “the fall in real earnings was limited to men” tell a complete story. As Bluestone and I show in the September 1990 issue of the *Cambridge Journal of Economics*, among men there have since 1979 been both stagnation in real median wages and a shift in the distribution, in the direction of a growing incidence of low-wage employment. Yes, women *did* enjoy a rising median, but for them, as well, there has been growth in the relative density of the lower tail of the distribution.

I concur with the authors' finding that the percentage changes in mean wages since the late 1970s have been similar for blacks and whites. But not so the distributional changes. Among blacks, the density of the lower

tail of the distribution has increased more than it has among whites. And the upper tail has decreased substantially—at least by the indicator of “annualized” (full-year equivalent) wages used by Lucy Gorham and me, in recent research conducted for the Aspen Institute and the Ford Foundation.

I have already said how much I appreciated the eclectic nature of the authors' estimates on (or, in some cases, intelligent guesses about) the probable causes of these wage developments. But I find it curious that, having offered multiple causal interpretations, they choose to end their article by taking a policy stance based entirely on a conventional human capital approach. Such strong emphasis on education and training (plus taxes and transfers) gives short shrift to the lively ongoing debates about the long-term character of strategic decisionmaking in American business, and about the social consequences of many managers' opting for a low-wage, low-skill “trajectory” rather than a technology-forcing high-wage, high-skill development path. I realize that the mapping of micro-economic research on households into the current policy debates on “competitiveness” requires taking some risky leaps in theorizing. But surely the severity of the problems we are discussing justifies some intellectual stretching.

Bennett Harrison,
Visiting Professor of Political
Economy, Carnegie Mellon
University

An Opportunity That Mexico Must Not Lose

U.S.–Mexican relations are strewn with lost opportunities. Joseph Grunwald (“Opportunity Missed: Mexico and Maquiladoras,” winter issue) identifies one of them, Mexico's inability to use U.S. assembly plants (maquiladoras) to modernize its economy.

The four “Asian tigers” became successful exporters in the 1980s because they did not waste such an opportunity. Grunwald recommends useful ways for Mexico to use maquiladoras to generate development for the entire country. Mexican President Carlos Salinas, however, has leaped beyond maquilas in proposing a free trade agreement with the United States.

After some hesitation, President Bush accepted Salinas's proposal. Canada has now joined the discussions. If the three sides succeed, they will create a free trade area of more than 360 million people, the first one in the world that combines both developing and developed countries.

The proposed agreement has already generated substantial investment in Mexico. In 1990, according to a report by Salomon Brothers, Mexico obtained \$8.4 billion in foreign investment, roughly two-thirds of all foreign investment in Latin America last year. Foreign investors want to produce goods for an expanding Mexican market and to export goods to the largest market in the world, the United States. Under a free trade agreement, Mexico will be the only developing country in the world with guaranteed and unrestricted access to the U.S. market.

Maquiladoras were originally proposed by the Mexican government in 1965 to employ Mexican agricultural workers who returned home after the United States stopped the bracero program. The United States helped the maquiladora program by changing its trade laws to permit Mexican exports of assembled products to be taxed only for the value-added provided by Mexican labor. Ironically, the program created jobs for women, not for returning male farmers, and instead of stopping the flow of illegal migration, it probably increased it. The maquiladoras attracted youth from the interior and

served as a way station before they crossed the river in search of higher wages.

Maquilas will be rendered obsolete by a free trade agreement, but the lessons proposed by Grunwald will remain relevant. The central issue for Mexico is whether the new investment will be an appendage to the U.S. market or whether it will be the stimulus for a modern Mexico. The question is whether Mexico will repeat its past mistake or learn from the experience and use the investment to narrow the gap separating the U.S. and Mexican economies.

In the long term, Salinas's decision to integrate the North American economies could have as profound and positive an impact on the United States as Mikhail Gorbachev's decision to end the Cold War. The U.S. economy will regain a global competitive edge that it has been losing over the past decade. Mexico will gain jobs, growth, and development as it passes through a very delicate political transition. And, most important, North America will gain a head start on Western Europe and Asia as the three great trading areas gear up for the 21st century.

Robert Pastor,
Professor of Political Science,
Emory University

The Review welcomes comments from its readers and will print them from time to time. Letters should be addressed to the Editor, The Brookings Review, 1775 Massachusetts Avenue N.W., Washington, D.C. 20036. The letter writer should include his or her name, address, and daytime telephone number. Letters will be edited to conform to style and space.

Some Thoughts on Turning 75

BY BRUCE K. MACLAURY

The Brookings Institution turns 75 this year, and that calls for a little celebrating. To begin with, readers of this *Review* will have noticed (we hope) a bit of stylistic updating—a journalistic face-lift, so to speak. And if you happen to wander past our home at 1775 Massachusetts Avenue, we hope you will also notice the banner stretched across the building proclaiming “Seventy-Five Years of Thinking the Future.”

Eye-catching as these changes in appearance may be, it's more the continuity than the change that distinguishes Brookings in the field of public policy. From the earliest studies of administrative reform to today's efforts to model a new world order, our mission has been the same: to apply the tools of social science research to policy issues of importance, and to publicize the results in ways that are accessible to a broad range of interested citizens.

With a research staff of fewer than 50, the Institution has consistently published between 20 and 30 books a year for the past couple of decades. The topics have ranged from the technical—how to account for productivity growth—to the popular but controversial—how to reform America's schools. In each case, the authors are as interested in the practical application of their findings as they are in the critical acclaim of their academic peers. This dual focus is very much in the spirit of Robert Brookings, the guiding force behind the Institution in its early years.

Published studies are only the starting point in our efforts to bring reason to bear on policy issues. We are not so innocent as to believe that many political leaders have time to read weighty evidence, at least while they're in office. So the results of these studies need to be conveyed through op-ed articles, television appearances,

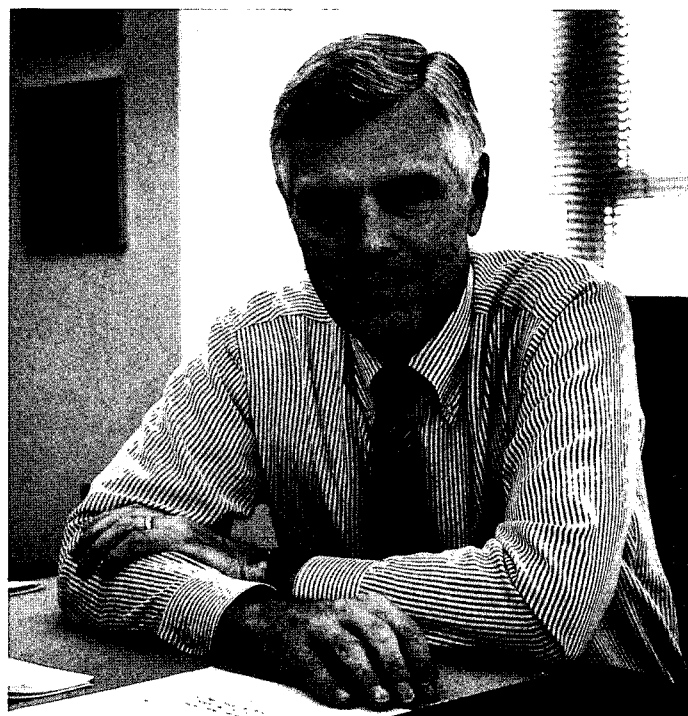
and congressional testimony.

But the printed word, if only the starting point, is nevertheless the essential building block in our strategy to have an impact on the course of events. Without the discipline of empirical research and orderly thinking, the views of Brookings' scholars should carry no more weight than those of other intelligent voters. As one of our staff put it, the published studies are our license to speak with authority, not as pundits.

To take a current example, several members of the Brookings staff have been called on repeatedly in recent months by the media to offer their views on developments in the Gulf crisis. Their credibility is not simply asserted, but is attested to by their own previous work—studies of the Camp David accords, simulations of conventional arms engagements in the Middle East, studies of chemical and biological weapons, and analyses of the proliferation of missiles among developing countries.

There is a love-hate relationship between experts and citizens in a democracy. Each of us has as much right as the next person to choose whom to believe when it comes to deciding issues that affect our lives and the lives of our family, community, and nation. Experts can help us decide, but they can't decide for us. For 75 years, the Brookings Institution has sought to provide an environment where practical scholars can engage in research without pressures for partisan answers. As in any academic setting, the views of Brookings authors are their own. That doesn't mean that their views are “the truth,” or that their colleagues necessarily agree with them. But the test of time shows pretty conclusively that they've done their homework—or they wouldn't be Brookings authors.

The challenges for public



policy that lie ahead will tax the best of minds. In today's world of dizzying realignments, “restructuring” has become the rallying cry for needed institutional change. Made famous as “perestroika” by President Gorbachev in his desperate efforts to reform the Soviet Union, the term can as appropriately be applied to such diverse issues as the global competitiveness of U.S. corporations, the accountability of Congress, or the devising of social programs that foster individual responsibility.

The common thread among these and other issues is the increasing dysfunction of existing institutions and boundaries, whether they take the form of compartmentalized corporate governance, vanishing Warsaw Pact-NATO confrontation, the separation of powers in an era of divided government, or the disintegration of the family. Within and across nations, the task is to shape new bottles to hold new

wine and to do so in ways that reaffirm fundamental values of individual liberty, political democracy, and economic freedom. It is hardly too dramatic to say that our generation faces some of the same challenges of institution building that confronted our founding fathers, but on a global scale. Building consensus by honoring diversity is less of a paradox than it sounds.

I hope that you continue to find the articles in this *Review* to be informative, stimulating, and sometimes controversial. Thinking the future is not an easy task. The world needs all the help it can get. That's what Robert Brookings thought, and that's what we intend to continue to do under his banner. ■

Bruce K. MacLaury is president of the Brookings Institution and has served in that capacity since 1977.

The Consequences

FORGING THE NEW WORLD ORDER

John D.
Steinbruner

War in the Persian Gulf and disintegration in the Soviet Union have restored a sense of tension to international politics. The exhilaration that burst forth with the liberation of Eastern Europe and the unification of Germany has yielded to concern about economic austerity. The constructive promise of Soviet policy has been darkened by internal ethnic antagonism, by a spiraling decline in economic performance, and by uncompromising behavior at both ends of the political spectrum. The decisive military campaign against Iraq has shattered an instrument of aggression but has not forged enduring political harmony. Given the way it unfolded, the war became a triumphant display of advanced munitions implicitly subordinating the more civilized methods of diplomacy.

Against this background, the new world order, which so recently seemed to be unfolding in a miracle of spontaneous design, suddenly appears to be in severe jeopardy, and the appearance alone helps make it so. Special ridicule and intense disdain are often reserved for those ideas that entice the public's imagination but then disappoint its strongest hopes. This effect is overshadowed in the United States by justifiable pride in an extraordinary military performance, but opinion in the world as a whole is more unsettled. The new world order has been advanced as a justifying

purpose for war. It was supposed to prevent it.

But despite the more somber mood, the new era is still forcefully emerging. The Gulf war has not overturned the underlying imperatives that have been transforming international politics. The alliance confrontation in central Europe, which provided the foundation for international security for nearly half a century, continues to dissolve for reasons beyond the sway of recalcitrant bureaucracies. The self-imposed isolation of the centrally planned economies is crumbling under the relentless pressure of international market operations and of irreversible technical change. These fundamental shifts mandate a dramatically revised basis for international politics. Harsh experience makes the task of shaping a new world order less heady now than it was a year ago, but no less necessary.

What Comes Out of Going In

The U.S. involvement in the Persian Gulf conflict will both reinforce the necessity of forging the new order and impose formative experience. Having led an international coalition in one of the world's most virulent endemic conflicts, the United States will undoubtedly be forced in the aftermath to develop new principles of security and to initiate a corresponding redesign of American foreign policy.

ILLUSTRATION
BY BOB SOULE

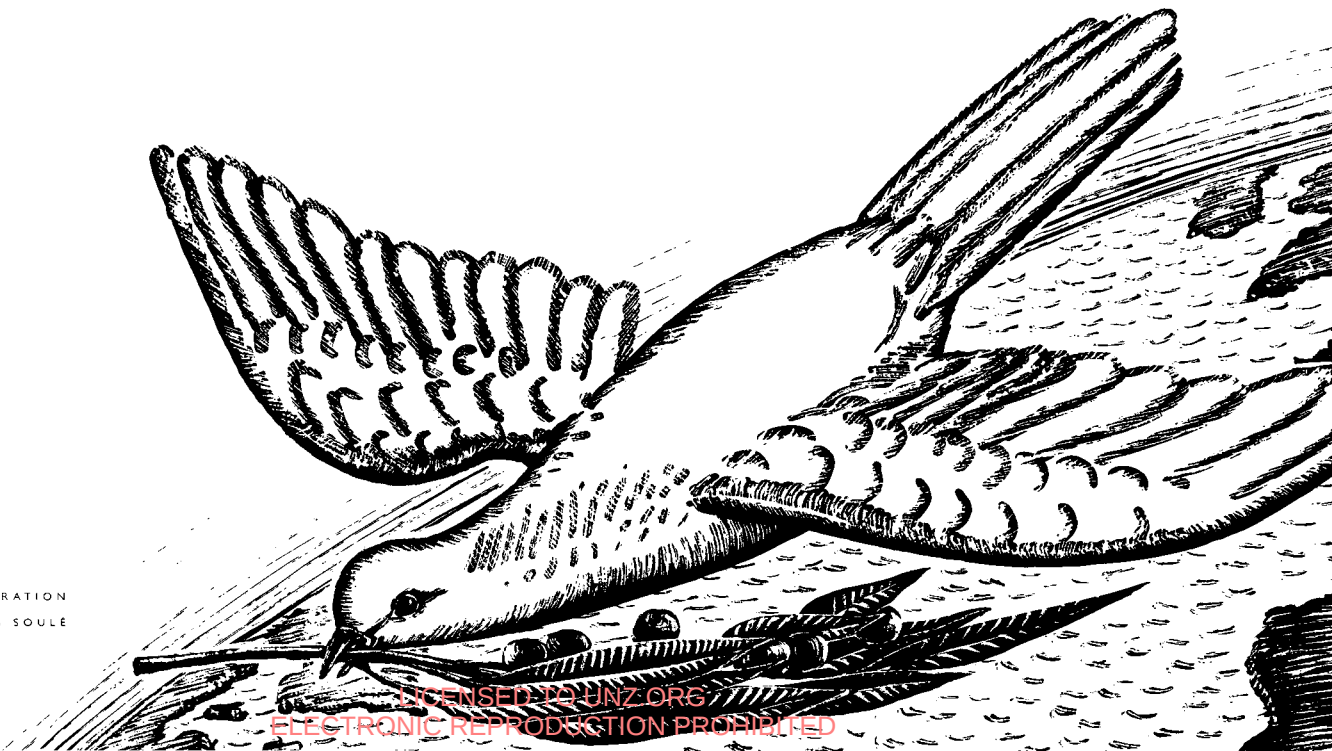


ILLUSTRATION
BY BOB SOULE

UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of the Gulf War

UNDER A FORCED SCHEDULE

In fact, the formation of the coalition already reflects significant adjustment. Relying on the approval of the United Nations Security Council to justify its action has not been a U.S. habit. Managing the consequences of even the most decisive military victory will make international cooperation yet more vital. Moreover, cooperation will undoubtedly have to be both broadened and systematically developed. Exposed to the highly corrosive effects of radical Arab politics, the initial coalition cannot expect to establish stable security in the region. The U.S. operational role has been too dominant, and the international community has been too incompletely engaged to provide the basis for enduring legitimacy. The crisis is, above all, a battle for legitimacy.

The basic elements of a security arrangement are not difficult to identify. It has become increasingly apparent that security in the Persian Gulf, as in the world more generally, can no longer be accomplished at acceptable cost through the balanced confrontation of national military forces. Nor can the Arab League or some comparable regional organization be expected to achieve a stable result without involving the international community. Given the increasingly dangerous impetus of military technology and its inevitable diffusion throughout the

world, cooperative regulation of all the major military establishments has become a practical imperative. Such regulation involves ceilings on force deployments, limitations on military operations, and controls on weapons trade defined in terms that can command agreement across conflicting political perspectives. Security cooperation must be accompanied, moreover, by universally inclusive political and economic policies. It is not feasible to isolate individual states or transnational political movements. Nor is it feasible to sustain a stable security understanding without also offering reasonable prospects for improving economic performance.

These requirements imply a much greater integration of security and of economic policy than has yet been achieved and also a much greater degree of international collaboration. They fall well short of demanding formal international government, but they do require, in a stronger and more specific form, the rule of law

John D. Steinbruner is director of the Brookings Foreign Policy Studies program.

He is at work on a forthcoming book, New Principles of Security.



that President Bush has stated as a primary objective.

It is notoriously difficult to give practical meaning to general ideas such as “a new world order” or the “rule of law” or the “integration” of political and economic policy. The U.S. political process has a strong bias for specific decisions and is highly impatient with such conceptual abstractions. It also has had the natural instinct to reinforce immediate success. In the aftermath of victory, the most readily available design for regional security will be legal formalization of the international coalition providing for an indefinite continuation of its presence in Saudi Arabia and Kuwait under U.S. command. Adapted to the more obvious sensitivities of the participating governments, this ar-

The chief problem facing the United States following military victory is the limitations and incompleteness of its own policy.

range might emphasize the positioning of supplies and continuous base access rather than the permanent stationing of forces. But, however judiciously formulated and managed, it would mean a continuing confrontation with Iraq and would leave the status of Israel, Iran, and Jordan troublingly ambiguous for very different reasons. U.N. resolutions cannot elevate such an arrangement to an accepted “rule of law.” Nor can they conjure up political appeal within the region.

The United States has developed neither a political program nor a regional economic program comparable to the vigorous investment of the past decade that made the mobilization of its military forces possible. It is prudent to assume therefore that the chief problem facing the United States following military victory is the limitations and incompleteness of its own policy.

The United States has acquired a commitment that cannot responsibly be restricted to the liberation of Kuwait. Moreover, given the political and economic disruption that the war has caused, the commitment cannot be postponed to a more convenient time. Any applicable designs for regional security, however imperfectly developed, will have to be rapidly adapted to fit the circumstance.

Two designs in particular appear destined to play this role of emergency reinforcement. First, the recently signed agreement for reducing conventional forces in Europe (the CFE agreement) embodies some basic principles of cooperative security that are relevant to the Gulf situation. Second, new perspectives on the control of weapons exports also have potentially important application. The two together do not offer a complete set of policies, but they do promise some of the most urgent components concerning arrangements for guaranteeing the physical security of Kuwait and Saudi Arabia and for regulating regional military forces.

Force Balances

In its specific details, the CFE agreement was overtaken by events before it was signed in November of 1990. The political dissolution of the Warsaw Treaty Organization and the scheduled withdrawal of Soviet forces mooted the major purpose of equalizing the conventional weapons deployments of the two alliances. The new patterns of thinking that produced the treaty, however, also produced a number of principles and shifts in policy that are likely to shape the evolution of European security arrangements. These principles have natural applications to other regions and in fact provide the outline for a global security arrangement. It is a strong presumption that the design of Persian Gulf security following the war should embody the new principles advanced for central Europe.

The key principle is that defense of national territory is the only legitimate purpose of military forces and that they should therefore be configured to resist assault with high confidence but not to project power. The implication is that organized security arrangements should be designed to reinforce this defensive doctrine and to restrict the offensive capability that threatens it.

That general principle is officially accepted by virtually all the European governments. Implementing it is another story. There are two big practical difficulties. First, as a result of their experience in World War II, the major European military establishments have committed themselves to deep interdiction missions and highly mobile ground operations against threatening opponents. The focus of planned attack is not merely or even primarily the lead elements of an opponent's force but rather its organizational capability located well to the rear of the immediate battle area. That strategy was demonstrably effective in the blitzkrieg operations of World War II, and it has the natural appeal that it serves to displace fighting and the damage it causes to the opponent's territory. Second, trends in modern weapons technology encourage this established preference for offensive maneuver. The application of sophisticated sensing and information processing technologies allows extremely accurate naviga-

tion over long ranges and the timely identification of targets by remote observation. Both conditions prevailed, of course, in the Persian Gulf conflict. To achieve a defensively configured security arrangement, either in Europe or in the Persian Gulf, requires reversing the operational doctrine of current military organizations and constraining inherent trends in military technology—obviously a tall order.

Four basic methods for solving this problem have been identified, and all four are presumably necessary to establish a robust security arrangement. The first is to equalize the conventional weapons firepower that might be brought to bear in any potential engagement. Organizing an attack designed to seize territory usually requires a superior concentration of force at the point of attack. Ground forces must move to occupy new territory and are thereby denied the protection of fighting from prepared positions. The offensive nearly always suffers a higher casualty rate and thus must compensate by having more firepower assigned to the immediate battle. To the extent that the stock of available firepower is equal, superiority at the point of battle cannot be achieved without suffering inferiority and hence vulnerability somewhere else. Moreover, under conditions of equal firepower, a locally superior concentration of force requires surprise since the defender has the potential to match the concentrations.

The second method of assuring a defensive security arrangement is to require “transparency” of force deployments and movements and thus to deny surprise. If provisions for direct inspection and other opportunities for observation are sufficiently well developed and if the information is shared among cooperating partners, potentially dangerous force concentrations can be detected before they are completed, thereby allowing countermeasures to be taken.

The timing of observation and of countervailing preparation can be made more manageable, moreover, by controlling the density of force deployments and their rate of maneuver—the third and fourth, respectively, of the basic methods. Density refers to the level of forces deployed in a given territory. Even if all potentially opposing forces are equal, it requires attention. If the overall density of forces is high, it is easier both to concentrate offensive forces without being quickly detected and to maintain defensive coverage in areas outside of the point of attack. At lower density of overall deployments, force concentrations are more obvious, and they expose those who risk them to counter-attack elsewhere. At lower densities, however, the relative rate at which potential opponents are able to maneuver becomes more critical as a supplementary method of control.

In Europe the CFE agreement was designed to equalize forces between the two alliances at a relatively high density and was supplemented with extensive provisions for inspections and control of ground force movements. The result was reasonable stability in any potential engagements between the two alliance organizations. The dissolution of the alliance confrontation, however, shows starkly that the national military deployments are not equal and cannot readily be made so because of inherent differences in the size of the

states and in their historical investment in military forces. The same inherent imbalance exists in the Persian Gulf region, where its significance is reinforced by more open, less populated terrain that is more suited to offensive maneuvers. Kuwait, for example, could not adopt Switzerland’s local defense posture with anything like the same effectiveness. Under the post-alliance circumstances in Europe, therefore, and even more in the Persian Gulf, a defensively configured regional security arrangement requires controls on force density and on relative rate of maneuver supplemented by active enforcement of transparency.

As an illustration of how a standard for ground force density might be determined, one can imagine an agreement defining the troop strength and integral equipment of a basic military unit at levels that might be considered appropriate for defending against attack but deficient for conducting it. Current practices of Middle East armies would suggest a typical standard armored brigade consisting of 40 tanks, 25 artillery pieces, and 55 armored vehicles. Such a unit would have less than half of the tanks and artillery assigned to current brigades designed for offensive operations. If the weapons inventories of the European states were organized into standard defensive brigades of this size, the ceilings imposed by the CFE agreement would allow on average one such brigade for every 50 kilometers of national border area to be defended. The agreements supporting German reunification provided for yet larger reductions in combined German forces. Moreover, the withdrawal of the Soviet army from Eastern Europe, combined with a redirection of internal investment priorities, is expected ultimately to produce smaller Soviet deployments as well. It is a reasonable surmise that the eventual density standard in Europe will be 75 kilometers or more for a standard defensive brigade.

Supplementing the density standard with a geographic grid system to keep local concentrations from departing too drastically from the average standard, while also controlling the rates at which armored brigades are allowed to move (that is, the number of units allowed to redeploy within a given time) and requiring periodic inspection, would provide a reasonably good practical approximation of the basic principles of defensively configured forces. A ground offensive could not be organized without breaking the rules and thereby giving substantial warning. That would not directly force a change in prevailing operational doctrine, but it would put the current emphasis on rapid offensive operations so at odds with declared policy and allowable deployments that an increased emphasis on defensive operations would probably eventually emerge.

Were this design to be applied to the Persian Gulf, the basic standards for average force density and for allowed concentrations at any given point would presumably have to be altered to take into account the very different conditions of terrain, population concentrations, and military history. As reflected in table 1, the armed forces of the Middle East states before the Gulf war varied considerably. Iraq maintained the largest army by far, roughly twice the size of any of the

others. Israel, Egypt, and Syria maintained forces that were more comparable in size although less so in assessed quality. Iran approached the size of this second tier, but the militaries of the other regional states were considerably smaller. The table shows the consequences of organizing all these forces into standard defensive brigades and then regulating the number of density measured in terms of the land perimeters that each of the countries is required to defend.

These simple numbers illustrate the considerations and fundamental problems that arise in devising a regional security arrangement. If a high density standard (25 kilometers per brigade) were used as the regional criterion, smaller reductions would be imposed on the major establishments, leaving Kuwait, Saudi Arabia, and the Gulf emirates, who happen to be the big economic prizes, well below the regional standard. Presumably an international force would have to be created to bring these states up to the regional standard. Such an international force need not be physically present in its full complement at every moment once the arrangement was in place, but it would have to be able

to react within the warning time provided by the inspection arrangement's supplementary controls on force concentrations. With better inspection provisions and stricter controls on movement, the international presence could be smaller. With weaker provisions, it would have to be larger.

Under the lower density standard (100 kilometers per brigade), the reductions imposed on the major military establishments would be more severe, and the disparities to be balanced by an international force would be smaller. Reliance on supplementary measures to control force concentrations and to detect any movement of forces would be greater under the lower density rules.

But however the basic ideas of density, concentration, movement, and transparency might be defined and measured, and however the relationships among them might be balanced, the fundamental point is that a regional arrangement organized along these lines involves a shift in the basis of security. Rather than relying for defense on national military capability supplemented by whatever alliances can be formed, the states of the region would have to rely on the integrity

Table 1: Middle East Ground Force Balances Before the Gulf War

COUNTRY	Total firepower in standard divisional units ²	Defensive brigades possible with prewar forces ³	Defensive ground perimeter (kilometers) ⁴	POSSIBLE DENSITY RULES ¹			
				Kilometers per brigade with prewar forces	Kilometers per brigade with equal forces ⁵	Brigades allowed at 25 kilometers per brigade	Brigades allowed at 100 kilometers per brigade
Iraq	27.5	185	2,800	15	31	112	28
Israel	13.3	90	830	9	9	33	8
Egypt	9.8	70	2,200	31	24	88	22
Syria	8.5	79	1,860	23	21	74	19
Iran	6.6	45	3,900	87	43	156	39
Yemen	3.6	30	1,600	53	53	64	16
Saudi Arabia	2.2	22	3,230	149	147	129	32
Jordan	2.0	19	1,730	90	91	69	17
Kuwait	0.9	8	410	55	51	16	4
United Arab Emirates	0.7	7	900	130	129	36	9
Lebanon	—	5	290	53	58	12	3
Oman	—	2	1,300	743	650	52	13
Bahrain	—	2	100	60	50	4	1
Qatar	—	1	100	76	100	4	1

Source: U.S. Army Concepts Analysis Agency, Weapons Effectiveness Indices/Weighted Unit Values III, Study Report CAA-79-12.

1. Defensive brigades only. A defensive brigade has 40 tanks, 25 artillery pieces, and 55 armored vehicles, reflective of the weapons ratios currently found in Middle East armies.

2. Armored division equivalent, developed by the U.S. Army, updated and adjusted for the Middle East context.

3. Includes the number of defensive brigades that can be formed from current forces plus defensive brigade equivalents composed of the residual weapons.

4. Considers a relatively smooth-lined military perimeter for defense of national borders, rather than the often twisting borderlines themselves. Coastlines are not counted because of the lack of significant amphibious forces in the region.

5. The ceiling for the five regional powers (Iraq, Israel, Egypt, Syria, Iran) is set at the current Israeli force level.

of the regional arrangement backed by an international guarantee. That guarantee would have to be jointly issued by the major military establishments—at least by the permanent members of the United Nations Security Council—and would presumably have to be based on active participation by a broad coalition of the international community. Within the region, participation in the security arrangement would have to be inclusive. All regional states would become members of the same security organization, and all would actively participate in shaping its rules, enforcing its provisions, and enjoying its major benefit—that is, better security at lower economic cost.

Such an arrangement would give practical definition to an essential part of what is meant by the rule of law. It would define the legitimate bounds of military operations—defense of national territory and only that. It would give operational meaning to the corollary principle that regardless of historical or political logic, borders are not to be changed by military force.

It is evident that the states of the Middle East are not immediately prepared for such an arrangement. As a direct result of the war, Iraq's military forces have been reduced to a level comparable to those of its immediate neighbors Syria and Iran, but in that case would still be superior to those of Jordan and decisively superior to those of Kuwait and Saudi Arabia. By using a common density standard and a balancing international force, a regional arrangement could be created among these states whose basic criteria could be extended fairly readily to Egypt. The smaller Gulf states could be covered with the international force along with Kuwait and Saudi Arabia. It would be exceedingly difficult, however, to incorporate Israel into such an arrangement and equally difficult to leave it as an exception.

Israel stands in stark political confrontation with most of the other states in the region over issues concerning the control of territory. Israeli armed forces exceed those of each of the states with which it shares land boundaries and are generally considered superior in quality. Israel's security policy is fiercely self-reliant, and its operational doctrine in defense of its small land area gives overriding emphasis to preemptive attack beyond its borders against any mobilized threat. Because its land perimeter is much shorter and its total area is much smaller than the other major states, Israel's ground forces could not be adjusted to a common regional standard for force density without imposing highly disproportionate reductions. If, on the other hand, the force sizes are balanced directly among Israel, Syria, Egypt, Iraq, Iran, and perhaps Jordan, then Israel's deployment would have a much higher density, thereby enhancing its already superior offensive capabilities. The basic conditions of ground force deployment revealed in table 1 encourage the impasse that has been endemic to Middle East politics.

The Gulf war was not so appallingly destructive as to break traditional regional attitudes and political antagonisms, as World War II did in Germany and Japan. Nonetheless, the predictable surge of political resentment after the war and the intensified pressure of eco-

nomic austerity in the highly populated parts of the Middle East are likely to force some meaningful change. No one can confidently predict that a cooperative regional security arrangement will emerge from this caldron, but it is an idea likely to impress itself on those who are compelled to cope with the effects of war on regional politics. And it is worth noting that in the course of extending the design of regional security to other types of weapons, possibilities arise for compensating the inherent imbalance in ground force conditions.

Technology Controls

Cooperative security arrangements defined in terms of ground force concentrations are probably necessary for the new order, but they are certainly not sufficient. Even if the principle of defensive configuration could be perfectly applied to all the world's armies, tactical air and naval operations and weapons of mass destruction would remain, and these are less susceptible to defensive configuration. Although such weapons cannot directly seize and hold territory, they dramatically affect the armies that do. The Persian Gulf war has provided experience on that point that will undoubtedly preoccupy the texts on military doctrine for decades to come.

The fundamental problem with these weapons is that they can operate swiftly and decisively over very long ranges and thereby permit an opponent to collapse a defensively configured force by attacking selected points without having a superior concentration of ground force units. That problem has long been an immediate reality for nuclear weapons. Though we have been spared an actual demonstration, it is evident that a few hundred nuclear weapons delivered with sufficient precision can make it impossible for any military organization to function coherently. Conventional weapons do not yet have such decisive capabilities, but there is reason to be concerned about what they ultimately will be able to do if used preemptively with sufficient surprise. Chemical and biological weapons are inherently less threatening to military organizations but are massively and sensationally so to civilian populations. They open up the possibility of terrorism on a scale that is strategically significant. It seems obvious that the familiar logic of mutual deterrence cannot provide an adequate basis for the rule of law and the new world order as far as these weapons are concerned. Somehow they will have to be effectively discouraged and collectively regulated.

Dealing with the many, well-rehearsed problems of weapons of mass destruction, especially under the forced schedule imposed by the Gulf war, will require observing two practical rules. The first is that a regional security arrangement for the Gulf must be assertively dedicated to preventing any further development there of nuclear, chemical, or biological weapons beyond the ominous but inchoate arsenal that already exists. The second is that cutting off the development of those weapons in the Gulf will be feasible only if drastic restrictions are imposed on existing U.S. and Soviet weapons and probably on those in Europe as well. The development of mass destruction weapons

can be halted in the Middle East only if development is halted worldwide. Trying to stop such weapons only in the Gulf—as an exercise in preserving superpower hegemony—is ultimately doomed, a point often made but still not fully grasped outside of the region.

It is helpful that biological weapons are already banned on a global scale and that a treaty to ban chemical weapons is well under way. It is far more difficult to ban nuclear weapons given their much more extensive development and dramatic consequences even in small numbers. Many practical schemes have been devised, however, for large reductions designed to curtail their residual dangers and strategic significance. Progress toward a stable regional security arrangement in the Middle East presumably depends on progress toward one of these schemes. If the integration of political economic and security policy means anything practical, it certainly means that.

With global restrictions on nuclear weapons frequently mentioned as a condition, the basic idea of prohibiting weapons of mass destruction in the Middle East has been officially espoused by several of the principal states. Egypt, not suspected of pursuing its own nuclear weapons program, has advanced a formal proposal to make the region a zone free of all weapons of mass destruction. Israel, which is widely presumed to have a secret arsenal of nuclear weapons but has not directly acknowledged or operationally displayed the weapons, has generally stated its support for the nuclear free zone idea and for a similar arrangement for chemical weapons. Iraq, believed to be making intense efforts to develop nuclear weapons, has nonetheless ratified the Non-Proliferation Treaty and has been complying with its inspection requirements. Both Egypt and Iraq have defended the possession of chemical weapons as a deterrent force in lieu of nuclear weapons, but Egypt at least has supported their elimination in connection with a nuclear weapons ban. Again the problem is not so much with the principle, as with the means.

The Gulf war itself will not provide an enduring solution. The attacks on Iraqi installations believed to be associated with nuclear, chemical, and biological weapons activities might retard the underlying programs but will hardly prevent them. For chemicals and biological agents, inherent production capability will quickly be restored as part of economic recovery. Iraqi military capability at any rate depends more on the development of delivery systems than on the production of agents. Varying estimates have been made about the state of the imputed Iraqi nuclear weapons program, but no set of installations has been authoritatively identified whose destruction would absolutely preclude a weapons program. The potential rests substantially on underlying knowledge—not a commodity that can be effectively bombed. The international diffusion of knowledge and of basic technology makes it impossible to deny access to chemical and biological agents and highly problematic to do so for nuclear weapons against a sustained effort to acquire them. Inducing self-restraint will ultimately be the only workable basis for controlling weapons of mass destruction.

It has long been clear that weapons proliferation

policy must be substantially redesigned. The current arrangements involve six legally and institutionally separate sets of activities, each focusing on a particular category of weapons: nuclear weapons, chemical agents, biological agents, missile delivery systems, standard conventional munitions, and dual-use technology (technology with both military and commercial uses). One important element is conspicuously missing: no focused efforts have yet developed to control access to advanced conventional munitions, arguably the most significant dimension of future weapons development. Moreover, there is little or no integrated assessment of how the various patterns of weapons proliferation are affecting overall military capability.

Although the methods used and the results achieved by the separate weapons proliferation programs differ substantially, all are designed to deny access to states that are judged, on political grounds, to be unreliable or potentially hostile. That objective was developed under the East-West alliance confrontation and economic isolation characteristic of the Cold War period and reflects its main features. In the post-Cold War period, the basis for categorical political discrimination against certain states is breaking down. Even more important, the internationalization of economic activity is rapidly undermining the ability to deny access to technology. In many critical areas of modern technology, most notably the array of microelectronic technologies that provides the basis for the most sophisticated weapons, commercial markets are driving technical development, and even the most advanced weapons projects are lagging substantially behind. But if basic access to technology cannot be prevented, there is a reasonable prospect for regulating the application of that technology. The Persian Gulf war might be the catalyst for the impending change.

The outline for a new policy has emerged in the course of a review of export controls on dual-use technology traditionally directed against Eastern Europe and the Soviet Union. Since 1949 the United States and its Western allies have, through the Coordinating Committee on Multilateral Export Controls (generally known as CoCom), regulated the export of a wide variety of technologies and products deemed relevant to weapons application. Through extensive lists of items that require an export license for trade, CoCom has attempted to deny state-of-the-art technology to the members of the Warsaw Pact even though in recent years many of the listed items were available through anonymous market transactions with countries that either were not members of CoCom or only nominally implemented its rules. With these market pressures building in the background, the political revolutions in Eastern Europe, and particularly the unification of Germany, have forced a major liberalization of CoCom export restrictions, the details of which are still being worked out. The liberalization has been conducted so far within the context of traditional policy, at least in the sense that there is an intent to preserve systematic discrimination against the Soviet Union on security grounds. The inherent pressures in the traditional policy, however, have generated active congressional scrutiny, formal

outside review, and increasingly vocal resistance from affected industries. This broader process has generated new methods of control and encouraged a new logic of policy with potentially strong implications for the Middle East.

The basic idea is to abandon the increasingly ineffective strategy of controlling dual-use technology by denying it altogether and to require instead disclosure of its end use. Such disclosure would allow the flow of technology to commercial purposes in the Soviet Union and elsewhere while preserving prohibition on military applications. The shift is intended to reinforce economic priorities and to provide a more constructive form of influence over Soviet investment patterns. It is also intended to encourage Soviet cooperation in controlling direct weapons products generally.

An effective regime for controlling weapons proliferation would almost certainly require both the method of disclosure and a policy of cooperation with the Soviet Union (and China). In some areas of technology, notably those involving biological and chemical agents, denial of basic access is so thoroughly infeasible that the only hope of effective control is to establish a general pattern of end-use disclosure and close monitoring arrangements that give some prospect of detecting diversion to weapons application. Unless the major industrial economies collaborate in setting and enforcing these rules, there is little realistic prospect that any dedicated effort can meaningfully control the process of weapons proliferation over the longer term.

The two ingredients for an effective international program—disclosure and general collaboration among the major industrial states—also offer a promising basis for a Middle East security arrangement. In fact, the Gulf crisis may demonstrate so clearly the inadequacies of traditional anti-proliferation policy as to spur development of a workable alternative. Crises, as is often noted, provide opportunity as well as danger. It is doubtful that the United States and its current coalition partners acting separately along traditional lines could have an enduring and decisive effect on the incipient nuclear, chemical, and biological weapons programs in the Gulf in the aftermath of the war. It is nearly as doubtful that they could extend the scope of traditional controls to include accurate long-range conventional munitions. There is far more serious prospect for effective regional controls in the context of a general, collaborative regime that offers positive incentives for commercial application of advanced technology and that integrates controls on the various weapons products.

Again, it is apparent that this element of the new world order is not fully formed in the international community as a whole and is substantially less developed in the Middle East. One cannot confidently expect that redesigned and consolidated weapons proliferation controls will emerge in the aftermath of war as part of a cooperative regional security arrangement for the Middle East. Since it is also unlikely, however, that traditional security practices could be restored, major transformations of this sort will have to be seriously considered and do offer some prospect for accommo-

dating the inherent disparities in ground force capability. If Israel could be induced to develop its own suggestion and to enter an agreement that does effectively prevent the use of mass destruction weapons in the region, then the higher density of its ground force deployments and the operational superiority of its tactical air forces might be tolerated in a cooperative regional arrangement.

What to Conclude?

One searches in vain for easy practical solutions to the many problems urgently posed by the Persian Gulf crisis. Regional security arrangements that would in principle provide a stable outcome require drastic

The Gulf crisis may demonstrate so clearly the inadequacies of traditional anti-proliferation policy as to spur development of a workable alternative.

transformations of policy of a sort that rarely occur. The transformations are not infeasible and may even be likely over the long term. At the moment they do stretch the imagination beyond its normal limits. On the other hand, reversion to the traditional politics of confrontation cannot be readily assumed. Though the inertia of existing policies and of prevailing emotions encourages such a thing, the consequences promise to drive political tolerance beyond its normal limits. One can say that it is a compelling moment for statesmanship and hope that someone, somewhere rises to the occasion. One can say also that it is a moment for serious public discussion in the world's democracies. Political leaders, we can be sure, will not rise to the occasion unless they are given some strong encouragement to do so. ■

More Like Them?

THE POLITICAL FEASIBILITY OF STRATEGIC TRADE POLICY

Pietro S.
Nivola

In discussions of American competitiveness, critics ritually bemoan the lack of “activist,” “coherent,” or “coordinated” trade and industrial programs in the United States. In place of what they see as an ineffectual patchwork of policies, the critics offer intricate theories and foreign examples of strategic trade for U.S. policymakers to heed. But the fact is that trade programs in the United States are more extensive than is widely believed. What’s more, they are about as active, coherent, and coordinated as can be expected under the circumstances. Confusing and makeshift as U.S. efforts may appear to their detractors, it is not certain that America’s in-

ternational rivals, Japan included, have superior strategies. Nor is it clear that, in the real world of American politics, the existing approach in this country can get much better.

Strategic trade, or industrial, policy means different things to different people. For the most part, the terms denote efforts to create competitive advantage by subsidizing industries that may generate surplus profits, premium wages, and technological spillovers to the rest of the economy. In principle, a nation that successfully targets such rent-yielding industries can raise its national income at the expense of its trading partners. Beyond that, however, interpretations vary on what the best strategic instruments are.

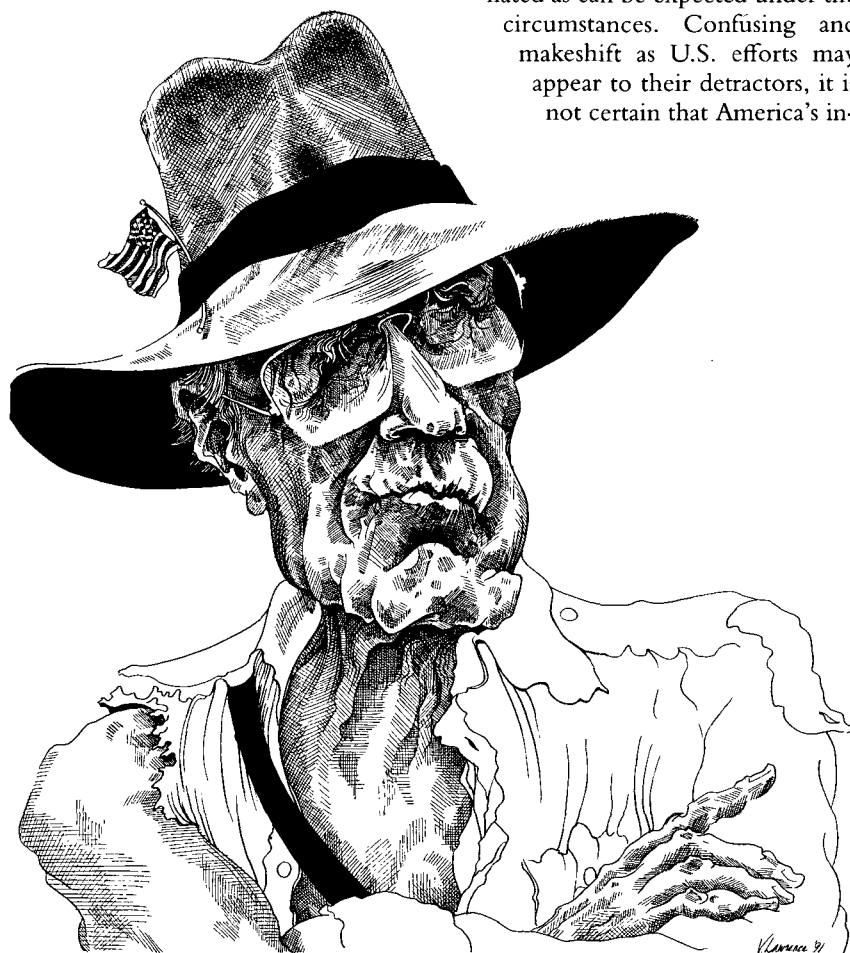
To some, they are government grants, tax credits, and antitrust exemptions for research consortia. To others they entail managed trade: negotiated shares of export markets to ensure that firms attain the sales volumes needed to realize economies of scale, hence deep pockets for research and development. And to still others, the smart strategy is protection, subsidizing the preferred industries through home-market closure.

For a handful of hardcore trade regulators, any or all of these devices are worth trying whether other countries are practicing them proficiently or not. But for most, the idea is that the United States can no longer adhere to a “seamless ideology of *laissez faire*” while the rest of the world performs clever industrial targeting.

Closet Industrial Policy

The scope of U.S. industrial policy, past and present, is often underestimated. The government played a vital role in the development of numerous advanced technologies, including semiconductors, computers, numerically controlled machine tools, aeronautics, and communications satellites. Currently it funds major projects to develop, among other things, high-capacity microchips, microwave and millimeter-wave monolithic integrated circuits, neural networks, high-temperature superconductivity, new composite materials, high-definition television, and biological and biomedical sciences.

The commitment of resources has been large and





Lawrence '91

enduring. Government funding of R&D has not lagged behind that of Great Britain, France, West Germany, or Japan. Tax credits and special depreciation allowances to stimulate high-tech sectors have been at least as generous as Japan's. Although federal expenditures for R&D dipped in constant dollars between 1967 and 1974, outlays since then have climbed steadily in real terms.

It is often noted that though the federal government spends almost \$70 billion a year on R&D, the spending is grossly skewed toward defense. Somehow it is assumed that since so much research money is channeled through defense, and so little is explicitly devoted to commercial technology, the United States lacks a bona fide industrial policy.

This supposition is hard to understand. Observers who speculate that defense research and development is no longer linked to perceived commercial applications ought to compare the respective preferred technologies lists issued by the Defense and Commerce Departments: they are virtually identical. If, at the

wave of a wand, Commerce were suddenly put in charge of all high-tech targeting, its priorities would look pretty much the same as the Pentagon's.

It is frequently stressed that defense research and development seems less effective than it once was in generating commercial benefits. Some advocates of administrative reorganization assume that this apparent problem is due to shortcomings in the government's organizational chart. But that firms may not be exploiting the potential spin-offs from defense R&D does not necessarily mean that those spin-offs are illusory or that the Defense Department is failing to introduce them. American businesses may simply not be taking full advantage of the opportunities. Leading a horse to water doesn't guarantee it will drink. And moving the trough from one side of the Potomac to the other changes nothing.

Using defense as a proxy for industrial policy has obvious political benefits. One is that there tends to be more consensus on subventions cloaked in national security. Without a security rationale, decisions about

Pietro S. Nivola is a visiting fellow in the Brookings Governmental Studies program and an associate professor of political science at the University of Vermont. He is the author of a forthcoming Brookings book, Frontier Justice: Regulating Unfair Trade.

THIS APPARENT TRAJECTORY OF
TECHNOLOGICAL LOW END AND TOWARD
AMERICAN INDUSTRIALISTS. YET
MEGAPROJECTS IS BY NO MEANS AN

new handouts (or bailouts) for private interests are likely to be more controversial. Granted, there is the risk that just about anything can be justified in the name of national security. (In 1944, the Reindeer Service in Alaska, an agency of the Interior Department, asked for more personnel on grounds that reindeer herds are “a valued asset in military planning.”) But if the aim of industrial policy is to get on with the business of industrial promotion, rather than to squabble over the selection of winners and losers, a comprehensive system, hospitable to all comers, has its advantages.

In addition, defense has offered budgetary assurances. Since 1975, defense-related R&D expenditures have tripled in constant dollars, while the R&D budgets of civilian agencies encountered some lean years during the first term of the Reagan administration. Only in the last few years, with real cuts in military spending, has defense R&D begun to experience uncertainties. But even this recent vulnerability is exaggerated. Appropriations for the Defense Advanced Research Projects Agency (DARPA) have exceeded its budget requests for the past three years.

But DARPA, some say, has traditionally favored high-risk military systems-oriented projects rather than lower-risk, commercial ventures. Not so. The agency’s agenda has shifted increasingly toward technology-base programs, in part because of increased congressional earmarking for items like HDTV and Sematech, and in part because more of these undertakings are thought to offer dual use. In the words of Senator Jeff Bingaman, chairman of the Armed Services Subcommittee on Technology, “It is becoming harder and harder to distinguish between military and non-military technologies.”

If this is the case, lodging one’s technology policy in DARPA makes administrative sense; it avoids the wasteful duplication of supporting related commercial and military research projects separately. In any event, since military and nonmilitary technologies intertwine, passing an industrial policy through the Defense Department’s back door is not more confusing, inefficient, or dishonest than the nominally civilian alternative in countries like France. “In the French case,”

write George Eads and Richard Nelson, “the commercially oriented aspects of the R&D support program got tangled with the objective of establishing or preserving a French capability to design and produce military equipment. As a result, clear commercial targets were not pursued, but industry was given shelter and subsidy simply to keep it operating.”

Nobody Does It Better

In principle, a strategic trade policy is supposed to underwrite sunrise industries, not sunset sectors. In reality, although some of America’s foreign competitors have targeted innovative high-technology fields such as aeronautics, telecommunications, and electronics that have thereby gained competitive strength, few subsidized industries have earned high or even normal rates of return. Much public financing has been squandered on antiquated, high-cost industries. Grants or equity infusions for the French, Belgian, and Italian steel producers in the 1980s, for instance, did not result in major expansions of capacity or in promotional export prices. Instead, they largely sustained inefficient management, uncompetitive wages, and mounting debt payments.

In general, the notion that the comparative commercial capacity of nations rests on the lavishness of their industrial aid programs is unsubstantiated. Take France, a notorious practitioner of industrial boosterism. According to Patrick Messerlin, French export targeting has resulted in “the wrong industries exporting the wrong products to the wrong markets.” In Germany, according to a study at the Kiel Institute of World Economics, the primary accomplishment has been to redistribute money from structurally strong sectors to weaker ones.

What about Japan, Inc.? Japan has variously been described as a developmental state, a system of state-led capitalism, a structure of guided free enterprise, and, most recently, an enigma. It is not always clear from these descriptions whether one ought to conclude that central administrative organs have been the primary orchestrators of Japan’s economic growth, or whether, as Karel van Wolferen has suggested, the

JAPANESE POLICY, AWAY FROM THE D THE HIGH END, FRIGHTENS MANY THE RECORD OF JAPAN'S HIGH-TECH UNBROKEN SERIES OF MIRACLES.

Japanese system is more like a headless horseman, “a complex of overlapping hierarchies [that] has no top.” Nor is it clear whether the telling thrust of Japanese economic planning has come primarily at the macroeconomic level (reducing the cost of capital, for example, by fostering a high national saving rate), or at the microeconomic level, by steering investment toward specific high-growth sectors and firms.

A scholarly feud continues to rage over how much the intrusions of the Japanese government have generated outcomes at variance with those expected from ordinary economic forces. On one side are studies of several successful industries—including autos, steel, machine tools, computers, and semiconductors—in which the government’s contribution is said to have been critical or decisive. On the other side is a growing body of research (some of it on the same industries) that reaches a rather different verdict. “In the machine tool case,” writes David Friedman, “the state exhibited neither the ability to plan effectively or independently nor the capacity to force private interests into compliance.” Even on the machinery industry’s leading edge, robotics, Michael E. Porter finds that the Japanese government played only “a modest role.” In his analysis of the energy sector, Richard J. Samuels concludes that the pervasive developmental state actually “does not lead, guide, or supervise private interests.” And in the automobile and electronics industries, many observers have cited well-known examples of bureaucratic misjudgments, some so basic that key firms, like Honda and Sony, may have prospered in spite of industrial policy, not because of it.

How the scorecard for industrial enhancement in Japan compares with that of the United States is not easy to figure out. Japanese efforts to create world-class industries in aluminum, chemicals, pharmaceuticals, and commercial aircraft must be rated failures in comparison with their U.S. counterparts, most of which received varying degrees of government support. Increasingly, Japan has targeted areas in which the United States has held the highest levels of technical capability. This apparent trajectory of Japanese policy, away from the technological low end (textile plants and rice

paddies) and toward the high end (computers, aerospace, and biotechnology), frightens many American industrialists. Yet the record of Japan’s high-tech megaprojects is by no means an unbroken series of miracles.

In its quest for excellence in computer technology, MITI’s Very Large Scale Integrated Circuit Program has to be considered a success. It helped give electronics companies the basic skills needed to enter and, in a decade, dominate the memory chip business. On the other hand, the Fifth Generation Project, initiated more than nine years ago to develop computers with artificial intelligence, has fallen far short of its original goals. Likewise, the so-called Superspeed enterprise has accomplished little in Japan that companies in the United States have not been able to achieve themselves. (Thus Cray Research, Inc., has remained the world leader in supercomputers and this year may overtake Fujitsu as the leading seller in Japan. Recently, Intel Corporation has also shown an ability to beat Japanese supercomputer firms on their home turf.) And in the much publicized prosecution of high-definition television, the jury is still out on whether Japan, which had begun researching HDTV 20 years ago, picked the optimal technology or may have locked itself into a nondigital system that is less than state-of-the-art.

One fact about Japanese commercial policy is now widely recognized. With the economy well beyond the catch-up stage, Japan’s vaunted economic bureaucracy exerts less control and engages in less effective strategic planning than it did earlier in the postwar period. The mixed bag of results since then scarcely warrants the conclusion that industrial policy remains the basis of Japan’s economic prowess, or that it accounts for that country’s competitive edge, real or imagined, vis-à-vis the United States.

Finding Targets ...

If it were possible for a government bureaucracy to perform the calculations that strategic trade theory requires, one nation’s strategic programmers might be able to best the competition. Proponents of high-tech

industrial policy have advocated support for sectors that are knowledge-intensive, pay high wages, have high valued-added, face rapid product cycles, are subject to high demand elasticity, exhibit scale economies, contribute to economic growth and productivity, and affect many other industries. But almost any industry can make a claim under one or more of these crude tests. The requirements of strategic targeting are more exacting: significant rent-generating industries must be identified and bolstered to yield a higher return than would other uses of the same resources. Politics aside, no executive agency, no matter how well staffed, funded, and organized, is likely to make this identification easily. Not the least of the imponderables is whether *any* discrete industry, or group of industries, commands economic rents so disproportionate (or even significant) as to render a deliberate national rent-shifting strategy worth risking on its behalf.

The discovery of plausible candidates might be easier if the market potential of emerging technologies could be accurately predicted. But the best efforts to make such predictions can charitably be characterized as seat-of-the-pants. The programs to develop breeder reactors, synthetic fuels, and a space shuttle were not senseless decisions in the contexts of their times, only premised on unreliable forecasts. In the first instance, experts were anticipating continued exponential growth in the demand for electricity. In the second, they assumed oil prices would never plunge below \$40 a barrel. And in the case of the space shuttle, the commercial mission (repair and retrieval of malfunctioning satellites in geosynchronous orbits) was thought to be more salable than it turned out to be.

To help decisionmakers avoid such mistakes, it is commonly recommended that the choice of suitable targets be industry-led. But an industry-driven selection process can easily become self-serving, with no promise of greater precision or efficacy. When the National Advisory Committee on Semiconductors (composed of corporate executives as well as government officials) prepared a plan for how to revive the semiconductor industry, its initial draft suggested a sweeping salvage operation, replete with everything from multibillion dollar loan guarantees to domestic content requirements, not only for chipmakers but for the entire American consumer electronics industry. Granted, proposals like this presume a commitment of resources from the private sector as well. If government is only supplementing private investment pretested in the capital market, the chances of sponsoring a boondoggle supposedly diminish. But in fact the matching-grant method provides no such assurance. The private investors are likely to make their contributions contingent on government support. Indeed, pending that support, they acquire an incentive to withhold investments they might otherwise have made on their own. The contrast between public projects and public-private partnerships, in terms of the real economy's bottom line, often turns out to be a distinction without a difference.

Regardless of who leads the search for industrial targets, the decisions will not aim merely at the sectoral level; increasingly, they will attempt to favor or exclude

particular firms. In a globalized economy it is not obvious how this can or should be done. Strategic trade theory presupposes that to the victor go the spoils: that is, Japan's commercial victories are an economic Pearl Harbor for us. But who is "us"—U.S.-owned companies or U.S.-based companies? By insisting on domestic ownership as a condition for participation in government-backed consortia like HDTV, the United States may avoid lining the pockets of foreign producers. Pursuing this nationalistic path, however, may also delay the technology's introduction in the U.S. market and discourage foreign subsidiaries, with U.S. workers and spillovers, from expanding their production and R&D operations here.

Moreover, in light of the complexity of modern corporate alliances and sourcing patterns, limiting participation to American companies scarcely promises to keep technological benefits in "our" hands. While enjoying exclusive government aid, the members of Sematech, for instance, are busy sharing their know-how with the rest of the world. Texas Instruments will soon fabricate some of its most advanced microchips in Taiwan, and is already engaged in joint production with Hitachi in Japan. Motorola has joined with Toshiba in a similar venture. AT&T will produce its best chips in Spain. Intel Corporation will sell memory chips with NMB Semiconductor. Advanced Micro Devices will be working with Sony, and IBM with Siemens.

Even deciding which firms are really "American" is increasingly complicated, since ownership can change. Although the Microelectronics and Computer Corporation, a cooperative enterprise, was initially confined to companies owned by U.S. citizens, Honeywell, a major participant, was later sold to the French firm Bull. It is becoming more and more difficult to know exactly who gets what from policies that purport to advance American commercial interests.

...And Hitting Them

Suppose that savants in the executive branch manage to pick nothing but the right specimens to receive industrial growth hormones. Injecting the necessary funds remains up to Congress. Inevitably, elected officials will be attentive to the distributional side-effects of the industrial therapy. The attention will take several forms, all of which lower the odds of successfully focused treatment.

Subsidies for high-technology industries, even in incipient fields that lack an organized constituency, are increasingly popular in Congress as worries about national competitiveness intensify. Yet the very popularity of these subsidies tempts legislators to expand the roster of eligible recipients, to engage in log rolling, and to disperse appropriations as widely as possible.

The lists of critical technologies prepared by the executive will be scrutinized by enterprising legislative staffers, who will inquire "whether the right things are in there, and whether there are technologies not included that should be included," to quote Senator Bingaman. Costly experiments will be launched, not on the basis of the technical assessments of specialized agencies, but by congressional entrepreneurs.

The government's entry into HDTV is illustrative.

The initiative for this \$30 million item in DARPA's budget came from Congress. No fewer than 10 committees and subcommittees held hearings between 1987 and 1989 during which the contours of the debate on HDTV were set. Among the panels figuring most prominently in this process was the House Commerce Subcommittee on Telecommunications chaired by Edward J. Markey of Massachusetts. At sessions of Markey's unit in March of 1989, for example, few real skeptics of HDTV subsidization testified. Representative Jim Cooper of Tennessee voiced concern. Whenever government "affirmative action" involves giving away money, he cautioned, the result is a "feeding frenzy on the Hill." But enthusiasts made the customary case for federal intervention: that the marketplace is imperfect ("as free as a gulag," intoned Representative Don Ritter of Pennsylvania). At the end of the day, few doubted that help for HDTV would be on the way.

Knowing how badly many lawmakers want to fund schemes of this sort, other members, prodded by entrenched lobbies, are in a stronger position to bargain for their traditional pet projects. Thus, spending for strategic producers is likely to be accompanied by concessions to nonstrategic producers, like textile mills or sugar farms.

Diffusion of the policy agenda is all the more probable because some legislators will complain of inequity if subsidies go only to technology-intensive export-oriented industries that earn supranormal profits and pay good wages. Is it "fair," after all, to raise the returns of profitable companies, and to hike the wages of currently well-paid workers, particularly when resources are thereby diverted from hard-pressed firms and workers in import-competing industries? Spokesmen for beleaguered constituents will demand compensation, and probably get some. Each year a stable coalition allows the Export-Import Bank to confer handsome subsidies on Boeing, General Electric, and Westinghouse. But would that coalition hold if government were not also subsidizing (through import quotas) the steel industry, the auto industry, the apparel industry, and so on? As in Japan, high-tech industrial policy may carry in its wake a good measure of "lemon socialism."

"The trouble with picking winners," Senator William Roth of Delaware once noticed, "is that each Congressman would want one for his district." A propensity to spread benefits widely has long been evident in public works, like water projects and sewers, and in social programs, from the old Model Cities and Economic Development Administration grants-in-aid to Title I disbursements under the Elementary and Secondary Education Act. Less well known is that the same proclivity can pervade key programs in technology-related realms, like defense and higher education, where awards are supposed to hew more closely to merit-based criteria.

In his study of the politics of defense procurement, Kenneth R. Mayer looked beyond the relatively narrow distribution of prime contracts to a more interesting phenomenon, the pattern of subcontracts. There he found that money was being scattered everywhere.

No fewer than 48 states and perhaps as many as 300 congressional districts participated in developing the B-1 bomber, for example. The dispersion of subcontracts for the B-1 was far greater than that of large-scale commercial aircraft programs.

Likewise, James D. Savage, who studied the dissemination of federal dollars to universities during the 1980s, discovered that earmarked academic grants swelled from \$10,740,000 for just 7 projects in 1980 to \$202,537,000 for 87 in 1989. Institutions in all except four states were funded.

Why does Congress get these results? Members have always striven to bring home the bacon, but the past decade's austere authorizations for traditional pork-barrel items have heightened interest in distributive earmarking of programs with more robust budgets: for example, defense and academic R&D. In addition, the diminished gate-keeping power of the full appropriations committees and the ascendancy of "subcommittee government" may be abetting the dispersal of these and other remaining benefits. In a system where every other backbencher in the majority party is also a chairman, the distributive formula tends to be "a little something for everyone."

Tit for Tat

Thus a great deal of strategic assistance is likely to be mistargeted, or, at any rate, targeted about as well in the future as it has been in the past. Nonetheless, strategic trade zealots can arguably repair to a second-best position: if commercial subsidies are mainly intended for international bargaining purposes, it matters less whether the subsidies are economically efficient. U.S. trade policy may be an unguided missile, but if it persuades other countries to lay down their economic weapons, the policy works.

At first glance, that argument can be supported by game theory. Robert Axelrod's analysis in *The Evolution of Cooperation*, for example, implies that tit-for-tat would indeed be the appropriate strategy in commercial negotiations: we must cooperate with our competitors, but also be prepared to retaliate against them when they cheat. So if, say, the European Community pours its continental patrimony into subsidizing agricultural exports, the United States should respond in kind. Our subsidy, like theirs, has to be paid by taxing or borrowing from other parts of the economy. The economic activity that gets crowded out may have been more valuable than the extra activity (more wheat or corn sales) that gets stimulated, but if the eventual outcome is a reduction in foreign export subsidies, the staggering costs may be worthwhile. Hence champions of tit-for-tat are at pains to emphasize that the strategy is not supposed to start trade wars, but rather to bring freer trade.

To yield this payoff, however, the retaliatory game requires carefully measured reprisals, to be terminated as soon as one's rivals start cooperating again. The optimal player has to be flawlessly fair: never tempted to abandon cooperation for a first-strike; always impartial when deciding the other side has broken the rules; ever respectful of proportionality; nimble in applying and relaxing pressure on a submissive opponent; and

never inclined to hoard bargaining chips, or cling to a tactical advantage, for possible use in future negotiating rounds. In sum, the smart player must be, in Axelrod's words, not only "provocable," but "nice, forgiving and clear."

Regrettably, national political systems are not richly endowed with all these characteristics. The American political process, by world standards, is very nice and remarkably forgiving. But "clear"? A half-dozen executive agencies and two dozen congressional committees make foreign economic policy in Washington. This team puts in play about as many conceptions of fairness as there are players. Needless to say, not all of these conceptions reflect internationally accepted norms.

Consequently, like any nation state seated at the commercial gaming table, this one is not in perfect control of its moves. It may play the card of industrial protection or promotion to induce concessions abroad, only to conclude, rightly or wrongly, that the foreign concessions are mostly unsatisfactory. Whatever the case, the promotion and protection becomes politically difficult to withdraw.

The example of the government-assisted export drive for farm products is suggestive. Early in 1985, trade officials decided to fight fire with fire: to help American agricultural exporters bid back customers in markets lost to subsidized foreign competitors, a scheme was devised to give away some government-owned surpluses to prospective purchasers overseas. At first, the strategic plan targeted only a few selected markets—Algeria, for instance—where the European Community had clearly lured buyers by underwriting sales, and where subsidized U.S. exports would not displace commercial orders that would have been placed anyway. As Agriculture Secretary John R. Block explained, the objective was strictly to provide an "encouragement to trade talks" aimed at curbing foreign subsidies.

But the limited export bonus was soon swallowed by Congress into a wider-ranging proposal, the 1985 farm bill's export assistance apparatus which, quite indiscriminately, authorized more than \$5 billion a year in export credit guarantees. Maybe all this will one day force the EC to get serious about dismantling its disruptive Common Agricultural Policy, but so far it has only managed to spur, at considerable expense, excruciatingly slow progress at the negotiating table. In the meantime, the People's Republic of China is now one of the biggest beneficiaries of subsidized grain sales, and the system of commodity export enhancement has begun to look like another institutionalized program of farm income maintenance, not just a temporary tool for trade arbitration.

Random Events

America's game plan in international trade has been, and is likely to remain, largely improvisational rather than strategic. This is not always a bad thing.

The outcomes of a piecemeal policy can be serendipitous. Consider the expensive research programs for health and agriculture that, after defense, have enjoyed the most sustained support. Surely, critics would

contend, these investments have little to do with industrial strategy and everything to do with politics—the overrepresentation of farm states in Congress, the electorate's inelastic demand for fancy health care. Be that as it may, the consequence is that the United States is staking out clear leads in biotechnology and biomedical sciences. If these fields turn out to be among the great technological targets of the next century, the United States may have positioned itself admirably close to the mark. In the global economic archery contest, where shots are long, the range is foggy, and no government is a William Tell, letting fly a random volley or two may be as productive as taking dead aim at a possible mirage.

Furthermore, an effective industrial policy doesn't just initiate winning projects; it discontinues foolish ones. By this measure, the American system, for all its sacred cows, has performed considerably better than most. While the British and French stubbornly threw good money after bad to develop a supersonic commercial airplane, an American supersonic transport never got off the ground. When the U.S. program fizzled, pundits lamented the political system's inability to plan for the long term. But the private sector had chosen a different (more "strategic," as it turned out) course of action: by investing in new fleets of efficient widebodied and short-haul jets, rather than a Concorde, it proceeded to lock up most of the world market for commercial aircraft.

Similarly, while this country, like some others, overbuilt its nuclear energy facilities, unlike some others, it has managed to shut down experimental installations of truly questionable economic merit, the Clinch River Breeder Reactor, for instance. And while the government of Japan has spent a decade flailing about in the science fiction of its Fifth Generation Project, less ambitious efforts on this side of the Pacific have kept the United States well ahead in developing electronic artificial intelligence.

To be sure, these good calls have often been accidents. The SST was grounded not by judicious trade strategists, but by environmentalists and local opposition (for a time, the New York Port Authority refused to allow supersonic planes to land at Kennedy Airport). The Clinch River plant was halted not for want of endorsements from President Reagan, but by his budget cuts in other areas. (The breeder program's congressional coalition, built on logrolling, was undone when the axe fell on other energy projects.) The failure of the United States to embark on a full-blown Fifth Generation Project of its own was not planned or recommended. To the contrary, for years the air was filled with dire warning about how, if Japan's exertions were not emulated, the United States would lose its computer industry. But somehow salubrious inertia prevailed.

What Shouldn't Be Done?

Distinctive American political institutions—poor party discipline, divided government, frequent elections, judicial policymaking, federalism, and a general distrust of big government—often immobilize the system, preventing desirable policies from being

IN THE GLOBAL ECONOMIC ARCHERY
CONTEST, SHOTS ARE LONG,
THE RANGE IS FOGGY, AND NO
GOVERNMENT IS A WILLIAM TELL.

adopted. To take the most obvious example, if Congress wanted to deal seriously with budget deficits (and also improve trade imbalances, capital costs, air quality, and energy conservation), it would simply raise automotive fuel taxes to levels more comparable to those of virtually all other industrialized countries. Instead, eccentric alliances of suburban conservatives, urban liberals, and rural members of the biennially elected House of Representatives habitually scuttle all but the paltriest gasoline tax increases. Deadlocks over issues like this are the bad news.

But it is probably unproductive to keep dwelling on these rigidities, or to fantasize that their biases will ever be corrected. The good news of American politics with its multiple checkpoints and peculiar partisan alignments is that a relatively high quotient of unsound *dirigisme* can be stalled. Flexing this comparative advantage may be more fruitful than trying to mimic the rest of the world's statist exercises.

This means, for starters, vetoing the usual nostrums. Reorganization of the current hodgepodge of agencies administering industrial policy is unlikely to change the end-product. A new Department of Trade and Industry would have the same agenda as the existing Department of Commerce, whose vision of America's technological frontiers is, in the last analysis, remarkably close to the Defense Department's. The new bureaucracy would face the same intractable tasks as the old, and it would receive instructions from the same assortment of congressional micromanagers.

Boosting the already generous level of subsidies could also prove disappointing. Projected reductions in defense spending should free up existing funds to support more precompetitive commercial research projects. A case can be made for shifting more of these resources from product to process R&D. Beyond that, however, caution is in order. A higher R&D tax credit may be an increasingly popular idea, but there is real doubt whether the tax preference would pay for itself by encouraging much research beyond what would happen anyway. (Even with the existing credit, the General Accounting Office estimates that every dollar in revenue that the Treasury forgoes may produce as

little as 15 cents in truly new R&D.) As for other forms of increased subsidization, new prospects of direct grants will give rise to ubiquitous claims. In the context of today's budgetary constraints, many of these demands would have to be met by subterfuge—principally, I would guess, by such off-budget techniques as import restraints and offshore market-sharing arrangements. Judging from past experience, these experiments in managed trade will, if anything, strengthen the industrial policies of foreign competitors. Under the terms of the U.S.-Japan Semiconductor Trade Agreement, for instance, MITI was able to cartelize the Japanese chipmaking industry, finally realizing the monopoly prices and profits that strategic trade theorists prophesy.

Signs of new interest in reviving old regulatory programs should be challenged before they threaten to turn the clock back on the positive reforms of the past two decades. In Washington it is becoming fashionable, for example, to favor renewed antitrust actions against corporate mergers. The system of checks and balances outside the Beltway (in this case, Reagan appointees to federal courts) may countervail some of this activity. Still, at a time when government should permit more joint manufacturing and perhaps even marketing arrangements to compete with Japan's *keiretsu* and Europe's publicly propped consortia, any resurgence of 1960s-style activism in the Justice Department and the Federal Trade Commission is arguably the last thing American entrepreneurs need on their minds.

These modest thoughts will be dissatisfying to those who believe that the solution to the nation's competitiveness problem lies in applying foreign models and abstract academic theories to the conduct of American commercial relations. But even if those models and theories were largely compelling (they often aren't), why bother to admire them if they are politically inapplicable? Better to do what can be done. And if that means less, rather than more, of what others theoretically or actually do, the anomalous behavior may even turn out to be our gain and their loss—in short, a genuine case of strategic trade. ■

Making New Rules

High-Tech Trade Friction and the Semiconductor Industry

Kenneth Flamm



Kenneth Flamm, an economist, is a senior fellow in the Brookings Foreign Policy Studies program. This article draws on research found in "Semiconductors," in Gary Hufbauer, editor, *Europe 1992: An American Perspective* (Brookings, 1990), and in *Mismanaged Trade? Strategic Policy and the Semiconductor Industry* (forthcoming).

Some time this summer, probably around July, President Bush will announce that he has concluded a new Semiconductor Trade Arrangement with Japan. The agreement, which will replace a 1986 pact due to expire in August, is arguably the single most important guidepost to the future direction of the international trading system for high-technology goods—more important, even, than the on-again, off-again "Uruguay Round" of the General Agreement on Tariffs and Trade (GATT) negotiations.

The semiconductor negotiations have received surprisingly little notice, probably because they address what is thought to be a troublesome little "sectoral" dispute between U.S. and Japanese companies. The U.S. semiconductor industry's global sales, after all, are only a tenth the size of the U.S. motor vehicle market. It had billings in 1990 of \$19 billion (out of a worldwide total of \$50 billion), compared with \$200 billion in motor vehicle shipments. And aside from the semiconductor industry itself, the only segments of U.S. in-

dustry to take an active interest in semiconductor trade policy have been the computer and communications equipment sectors, the chief users of the products most affected by the negotiations.

Despite their low profile, the negotiations taking place behind closed doors in government offices near the White House are anything but a minor sideshow. As in some other high-technology sectors, global electronics industry competition is today largely a two-sided duel between American and Japanese companies. But bilateral agreements between these two nations will be the model for expanded agreements as other countries' market presence grows. Today's bilateral precedents will be tomorrow's multilateral system.

Even more important, trade frictions in semiconductors are just the beginning of what promises to be a massive tangle of trade disputes in other high-technology sectors. In computers, telecommunications, satellites, pharmaceuticals, advanced materials, and air-

craft, the first bilateral skirmishes are taking place. Though the particulars vary, the central issues are almost always the same as those at the heart of the semiconductor negotiations.

The big issues are two. First, how much cooperation or collusion among nominally competitive firms, possibly mediated or encouraged by government, can be tolerated without making the notion of a competitive marketplace meaningless? Second, how can government subsidies and support for advanced technology—for decades the accepted and economically beneficial practice in the United States, Japan, and virtually all industrialized countries—coexist with open international economic competition in global high-tech industries? How must the world trading system be adapted to deal with the presence—or absence—of accepted norms for competitive behavior among high-tech firms and for relations with their home governments? How these two issues are settled will shape the world trading system for years to come.

The 1986 Arrangement

The American chip industry had three specific complaints in 1986. The first was the pricing of Japanese chip exports—the “dumping” issue. The second was Japan’s trade and subsidy policies, particularly the use of R&D subsidies, to promote its chip industry—the “targeting” issue. The third was restrictions, formal and informal, public and private, on the ability of American firms to sell their products in Japan—the “market access” issue.

The 1986 trade arrangement addressed two of these three issues. A so-called secret side letter to the arrangement tackled the market access issue by agreeing to try to expand foreign chip makers’ share of the Japanese market to 20 percent by 1991. In many respects this badly kept “secret” has been the most successful part of the 1986 arrangement: foreign market share in Japan has gradually climbed from under 10 percent to more than 13 percent, by the U.S. industry’s count. Substantial behind-the-scenes arm twisting by Japan’s Ministry of International Trade and Industry (MITI) surely played a key role in the rise.

The second part of the arrangement, an agreement to stop dumping by boosting prices of certain Japanese chip exports, was actually counterproductive. The most important product on which minimum price floors were imposed was dynamic random access memory (DRAM) chips, accounting for about one-third of U.S. chip consumption in 1989. Many American DRAM producers had dropped out of the market before the 1986 agreement took effect, and few were willing to risk the large investments required to reenter. Though government-sanctioned production cutbacks in Japan did help boost DRAM prices well above the floors, only a small share of the resulting profits dribbled back to American DRAM vendors, while U.S. chip consumers paid billions in increased prices. The windfall profits were plowed back into R&D and capital investments by the Japanese chip makers, usually divisions of electronics companies that make computer and communications gear. U.S. chip consumers—computer and commu-

nications gear makers in direct competition with Japanese electronics companies—watched angrily as their Japanese competitors improved their market position at U.S. expense.

Indeed, much of the price monitoring apparatus set up by MITI, in administering the 1986 trade arrangement, made it easier for the Japanese industry to organize itself to collect large monopoly profits from chip users. In 1987, the Japanese government imposed ceilings on domestic DRAM production, after a glut in the domestic market led vendors to circumvent ineffectual price controls on export shipments, and President Reagan moved to impose trade sanctions. Responding to a new round of American complaints, MITI retreated from an active and explicit role in setting production. Instead, a far more rigorous system of export price controls, geographic export allocations, informal “advice” on investment plans, and active coordination with the five companies accounting for the bulk of world DRAM production established a relatively tight cordon around the Japanese market. In 1988, these actions—in reaction to our trade policy—pushed foreign DRAM prices substantially above those faced by Japanese users.

The new spirit of cooperation among Japanese DRAM manufacturers persisted when demand for memory chips faltered in the late spring of 1989. As prices began to fall, the large producers, despite being the lowest-cost producers in the industry, cut production repeatedly to stabilize prices and shore up profits. Non-Japanese production rose steeply over this same period. A Japanese chip executive, when asked why his firm was cutting back DRAM production even though the market price was considerably above his production costs, explained candidly to a U.S. government official in early 1990: “Since the Semiconductor Agreement, we [Japanese DRAM manufacturers] have moved from competing for market share to market sharing.”

The irony of the 1986 agreement was that, after a decade of complaints by American producers over the role of MITI in issuing “administrative guidance” to Japanese industry, U.S. trade policy helped create a regime that considerably reinforced MITI’s power and influence over the Japanese semiconductor industry and encouraged Japanese producers to limit competition with each other. Before 1986 MITI’s influence within the industry—while considerable—was probably waning, as a result of the very success of its policies over the previous decade.

The Japanese Success Story

The rise of the Japanese semiconductor industry is a textbook example of how industry and government can cooperate to foster the rapid development of a high-technology industry. Through the 1960s the primary focus for Japanese industrial policy in electronics was its domestic computer industry. To sell in the Japanese market, American computer companies were forced into joint ventures with local firms, had sales ceilings imposed, or accepted other restrictions. By the early 1970s, however, several Japanese electronics companies’ U.S. computer partners had dropped out

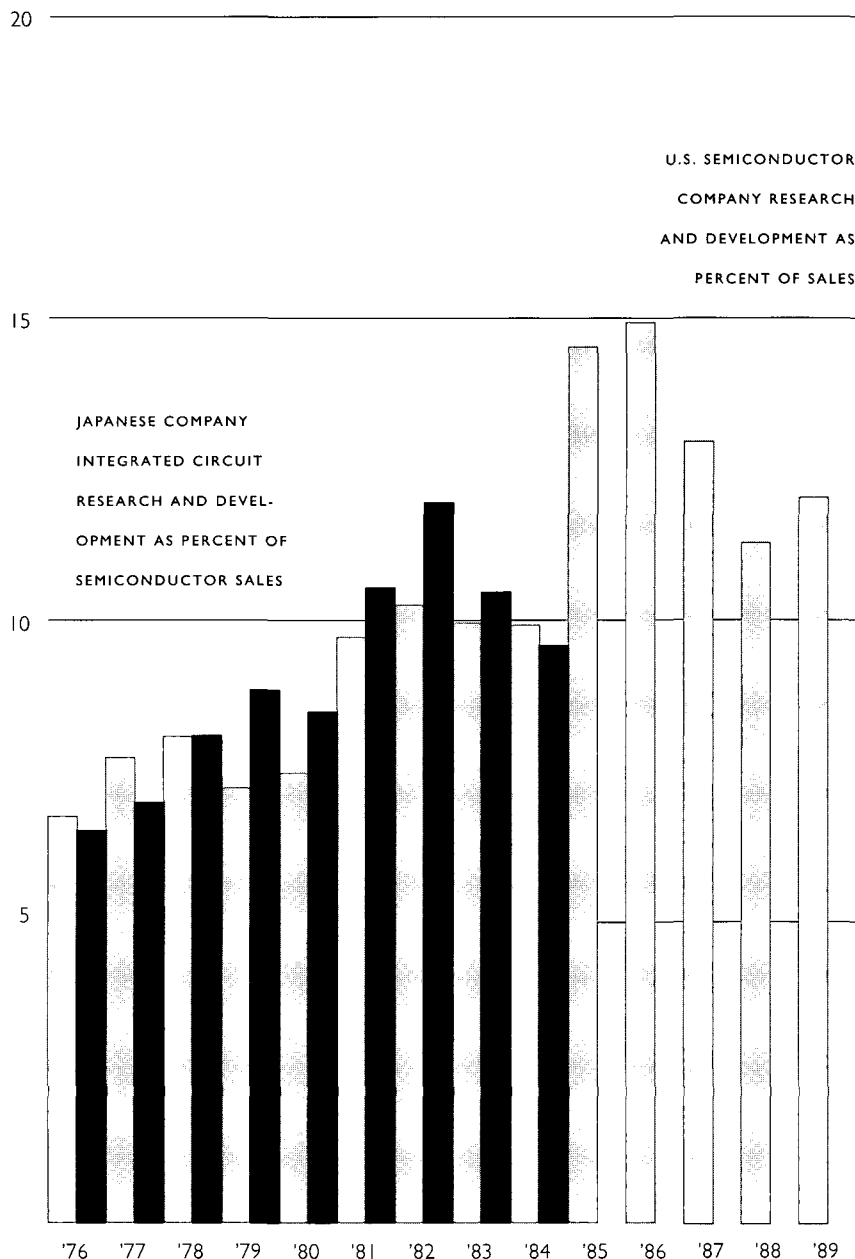


Figure 1. U.S. and Japanese Research and Development

Source: Semiconductor Industry Association and MITI. Research and development data for Japanese integrated circuit producers since 1985 have not been publicly released.

of the computer business. It had become clear that a frontal assault on the established mainframe computer market, dominated by IBM, was just not going to work unless Japanese companies could offer lower prices to offset the American advantages in virtually all other aspects of the computer business.

By this time the general design principles for a commercial business computer were fairly well understood. The continuing, extraordinary decline in the cost of computing power (some 25 percent a year after inflation) was due primarily to the use of ever cheaper and more powerful semiconductor components, rather than design innovation. By manufacturing state-of-the-art chips at lower cost and incorporating them into their machines, Japanese producers might be able to compete in established markets for computer systems.

The semiconductor manufacturing divisions of these same companies faced equally rocky prospects. Back in the mid-1960s, when American computer companies had first begun shipping computers based on advanced chips, MITI had undertaken a small program to upgrade Japanese semiconductor technology. Japan's first semiconductor memory chips were built as part of a related MITI project, the development of a high-speed mainframe computer.

But these efforts had not closed the gap with American companies. Cheap American chips flooded world markets, including Japan, and Japanese producers complained loudly about American chip dumping. Despite stiff trade and investment barriers, including the outright refusal to allow foreign producers to establish local Japanese subsidiaries, the share of imports in Japanese integrated circuit consumption steadily rose, to about one-third of the market in 1971, peaking at 40 percent in 1974.

About this time, MITI stepped in with a variety of more informal means to discourage the use of foreign chips. Imports of American calculator and memory chips—to be incorporated into, and often reexported as, Japanese calculators—were rising quickly. Calculator manufacturer Sharp had started the rush to advanced American chips, and MITI responded by making an example of it. When needed licenses were denied for imported chips used in Sharp's products, calculator makers quickly heeded MITI's insistence on a certain amount of domestic production. And as American companies attempted to recruit Japanese semiconductor executives to help build their local business in the early 1970s (when they were finally permitted to establish subsidiaries on a carefully controlled basis), at least one prominent Japanese semiconductor executive was informally dissuaded by MITI from making the contemplated move.

The MITI "jawboning" worked. The import share of Japanese chip consumption began a steady decline. Perhaps more important, government agencies rushed into place much larger programs to upgrade Japanese semiconductor technology. From 1975 to 1980, the government-owned telephone company sponsored two consecutive development programs for leading-edge semiconductor equipment and devices, the so-called Very Large Scale Integration (VLSI) projects. In

1976 MITI kicked in with its own four-year VLSI project. After organizing Japanese companies into research consortia, these projects pumped serious money into semiconductor R&D. Figure 1 shows that from 1976 to 1985 Japanese and American semiconductor companies spent roughly comparable shares of their sales revenues on R&D. The VLSI subsidies, however, added resources easily exceeding 40 percent of the Japanese industry's own funding of integrated circuit R&D during 1976-79.

With the help of the VLSI projects, Japanese companies developed expertise in a whole new generation of semiconductor production technologies. The key to American success in semiconductors had been Silicon Valley and its other American counterparts, dense clusters of technical expertise, where chip manufacturers could get easy access to the most technically advanced capital goods developed for use in production systems. Japanese chip makers hoping to beat their American competition on manufacturing cost and quality would need production machinery superior to that used by American producers. In the 1980s the VLSI effort came to market, as Japanese companies took the technical lead in shipping the most advanced and reliable production systems in certain key areas of the chip manufacturing process. With first access to this advanced production equipment, Japanese chip makers would henceforth have a head start toward cost and quality leadership. Ultimately, the new gear would give these same companies a competitive edge in the manufacture of computers, an advantage needed to offset countervailing U.S. advantages in design and software for these computer systems.

The next logical step was to invest aggressively in new semiconductor production facilities using the new production systems. Figure 2 shows that through the 1980s, relative to revenues, Japanese chip makers' capital spending substantially outpaced that of American companies. Together, the investment in the new manufacturing technology and the subsequent capital spending blitz made Japan the world leader in semiconductor manufacturing. U.S. companies' share of world semiconductor sales peaked in 1980, then plunged. Japanese companies' rising share of the world market through the 1980s was the mirror image of the U.S. decline (figure 3). The reversal of fortune for Japanese chip makers over the space of a single decade was remarkable—imports went from 40 percent of integrated circuit consumption in 1974 to 12 percent in 1986!

U.S. Trade Policy to the Rescue

In 1977, reacting in alarm to developments in Japan, U.S. chip makers formed an industry association and began to approach the government with complaints about Japanese policies. Japanese market access and targeting policies were issues right from the start. After 1979, allegations of Japanese dumping in the U.S. market became frequent.

In response to American complaints, MITI began to take a decidedly lower public profile. Its VLSI project, for example, was abruptly shut down in 1980. And the very success of the Japanese effort meant that

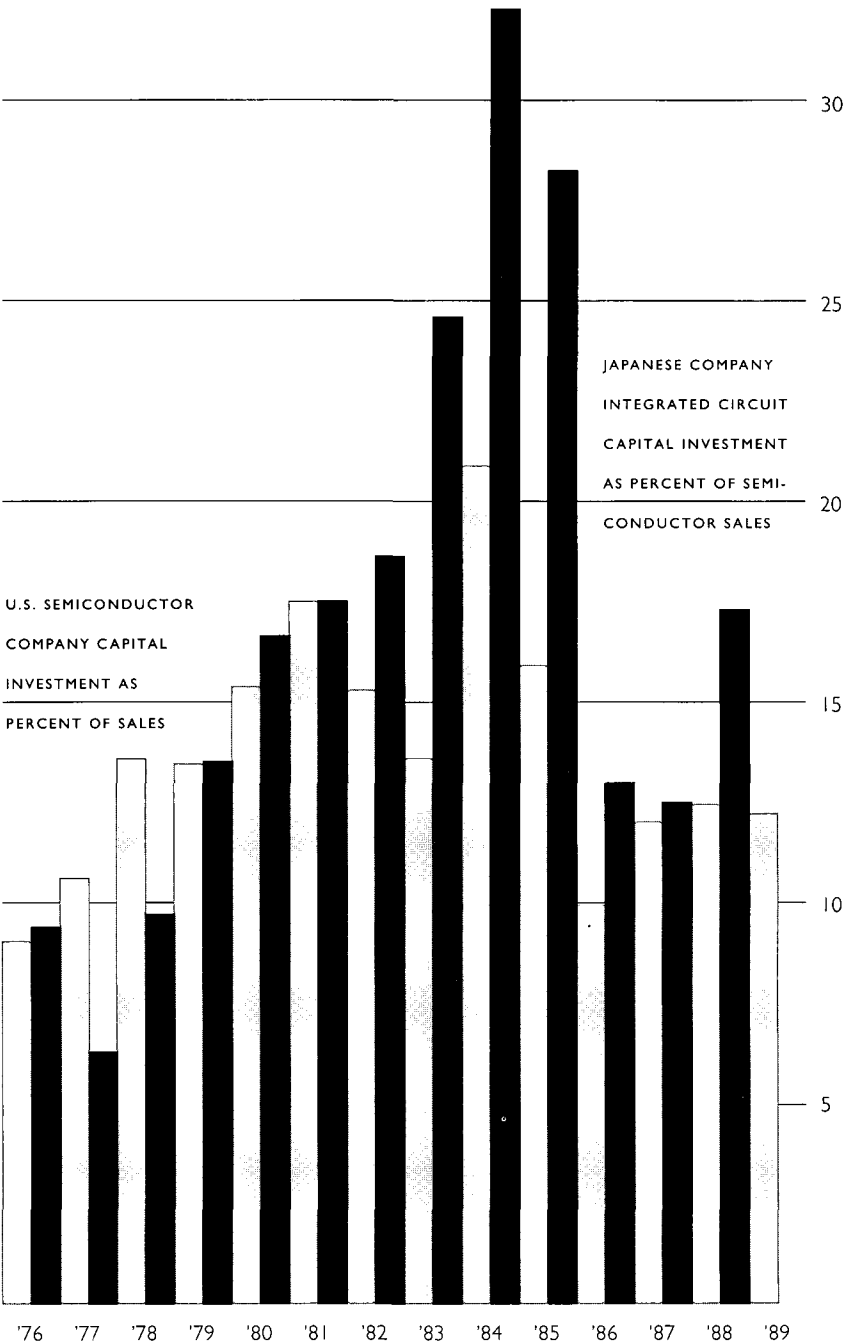


Figure 2. U.S. and Japanese Capital Investment

Source: Semiconductor Industry Association and MITI. Japanese company data for 1989 were not available.

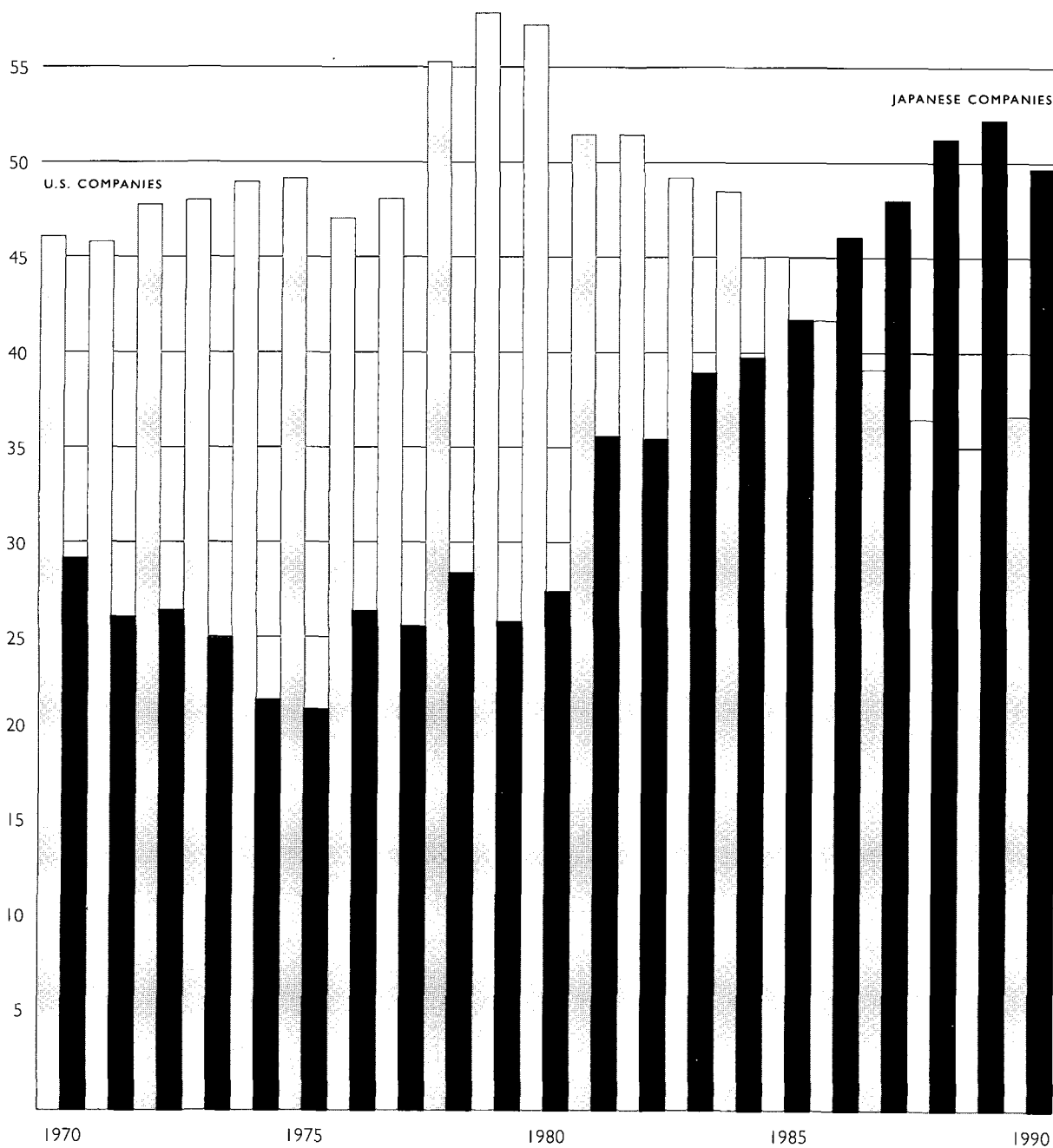


Figure 3. U.S. and Japanese Worldwide Merchant Market Share

PERCENT OF MARKET SHARE

Source: Dataquest. Data from 1970 to 1977 represent value of production. Data from 1978 to 1990 represent value of sales.

producers were increasingly able to stand on their own; government funds for R&D became relatively less important, as Japanese chip production surged upward on a self-sustaining trajectory. At the same time, however, increasingly loud complaints from U.S. competitors gave MITI ample justification for continuing to provide "guidance" to Japanese chip makers, as it attempted to manage semiconductor trade frictions with America in the 1980s.

Behind the scenes MITI continued to promote the domestic semiconductor infrastructure at the expense of imports well into the 1980s. As Japanese production exploded, for example, demand for polycrystalline silicon—the material from which the wafers on which chips are inscribed is made—shot up. Imports doubled in 1982 and, for the first time in history, exceeded domestic production. Although it is expensive for Japan to produce silicon (because of high electricity costs), MITI funneled subsidized loans from the government-owned Japan Development Bank to domestic producers to expand capacity, and sponsored a joint government-industry study group to tackle the "problem" of dependence on imports.

Negative attitudes toward imports seem to persist, and continue to surface on occasion. After a 1989 announcement of cost-reducing silicon production technology developed under MITI sponsorship, for example, a Tokyo press account noted that "Japanese companies have, until now, been totally dependent on imports for procurement of high-grade silicon materials for solar cell production. NEDO's [an agency within MITI] new technology is expected to pave the way for Japan's 100 percent domestic production of solar batteries, according to industry experts."

But U.S. trade policy has proved an extremely blunt instrument for attacking the challenges to U.S. interests—and ultimately to the international trading system—posed by industrial policy in high-tech industries. Targeting of technology, as a trade issue, is a waste of time, because the U.S. government itself pays a large part of America's corporate R&D bill, and the distinction between "defense" needs and technology relevant to commercial products often exists only in the eye of the beholder. More fundamentally, many economists agree that governments have a legitimate and desirable role in subsidizing R&D, and should probably be investing more in technology, not less.

Market access—aside from formal trade barriers—is ultimately an issue for competition and antitrust policy: can governments and corporations legitimately forge reciprocal alliances to restrain sales of foreign products? Even the dumping issue, ultimately, may be considered an antitrust issue. U.S. chip makers did not allege that Japanese chips were being sold in the U.S. market at prices below those prevailing in the home market, the standard notion of dumping. Instead, they accused Japanese producers of selling all their chips, worldwide, at prices that did not cover the full average cost of production, a practice that technical changes in U.S. trade law during the 1970s had also made actionable as dumping.

This "underpricing" in chip sales, said the U.S. industry, was designed as a predatory tactic to force

marginally profitable U.S. chip makers out of the market. For Japanese companies to sell chips at prices that would not permit full recovery of costs, even over the full product life cycle, makes economic sense only if they thereby create monopoly power, and then maintain and later exercise it to make above-normal profits to offset the losses sustained in forcing weaker competitors out of the industry.

The natural economic antidote for such pricing predation, then, is an active and vigorous competition policy. If the potential predators are forced to compete with one another, or if entry or reentry into the market is encouraged and fostered (or even subsidized as a retaliatory tactic), the above-normal returns that might make predation profitable will not be forthcoming.

Where Next?

At the moment, the most important negotiation affecting the international trading system in high tech is the Semiconductor Trade Arrangement. But an American Uruguay Round proposal to enshrine the U.S. concept of dumping within the GATT also merits scrutiny. The U.S. Commerce Department's proposals raise interesting issues for American high-tech industry generally. Costs for research and development—the very heart of any high-tech industry—are relatively fixed and occur before production even begins. They are generally spread over the product life cycle, rather than loaded onto the first few units of the product shipped. In addition, many high-tech companies benefit from so-called learning economies—manufacturing costs decline as the producer gains experience making his product. For these reasons, it is economically rational for a producer to quote a price for delivery on large contracts that may well be below the current average cost of production.

Such "forward pricing" has been standard practice within the U.S. chip industry and, for that matter, many other American high-tech industries—like aircraft—with similar cost structures. If the dumping standard applied to the Japanese by the Commerce Department were to be applied to American companies by other nations, or even within the United States, American companies would routinely be guilty of dumping in the course of their normal, competitive business practices. The U.S. government should be wary about establishing precedents that can so easily be emulated by others and turned against its own exports.

More important, what ought we do with the expiring Semiconductor Trade Arrangement? The counterproductive effects of the 1986 price floors have implicitly been acknowledged by the American industry: the price-fixing aspects of the current arrangement were dropped in a recent joint position worked out between the U.S. semiconductor and computer industries. Market share goals, on the other hand, have inflicted few apparent costs on the United States and may be defended as a modestly successful remedy for historical problems of market access.

Recourse to this policy instrument, however, raises questions about the long-term objective of American policy. The willingness of American chip companies to jump onto the MITI bandwagon when it is rolling

their way creates doubts about their determination to get MITI out of the administrative guidance business within the Japanese electronics industry. The U.S. semiconductor industry cannot have it both ways. If American chip makers genuinely want the U.S. government to insist that MITI's postwar role as the administrative guide for Japanese industry has no place in the market-driven high-tech trading system of the 1990s, and continue to push for structural change within Japan, they cannot at the same time promote an agenda that implicitly strengthens the system of informal, behind-the-scenes, quasi-legal guidance they have condemned.

Perhaps American chip companies have given up on an open trading system and prefer instead a system of "managed trade"—politically administered market shares. While such a system no doubt serves the U.S. chip industry's immediate needs, it poses long-term consequences for other high-tech industries and other markets, where successful U.S. companies are highly dependent on foreign sales and may very well wind up on the losing end of market share limits.

Hard Choices

In fact, American trade policy has come to a fork in the road. The semiconductor industry is the test case for the rest of our high-technology industries. The status quo is unsustainable. It is simply unacceptable for the American government to leave our high-technology firms, as individual players, at the mercy of coordinated strategic policies organized by coalitions of foreign competitors, backed explicitly or implicitly by their national governments. The danger that a significant degree of monopoly power can be acquired and exploited in high-technology sectors as the result of such strategic policies, endangering the ability of otherwise competitive industries dependent on the targeted sector to compete internationally, is simply too great, and the possible costs for American economic performance too onerous, to be ignored.

In the 1950s, or even the 1960s, coordinated assaults by groups of firms, backed by their national gov-

ernments, on international markets could be tolerated by a prosperous American economy, even viewed as a form of development assistance to the less well-to-do seeking to catch up. But today, when the United States no longer enjoys unchallenged technological supremacy, we can no longer afford to play by rules that hamstring our players. Quite simply, we must come up with some "rules of the game" for international high-tech competition—rules that do a reasonable job of guaranteeing relatively competitive and open markets throughout the industrialized world—or we must settle for the best share of a cartelized and balkanized world market that we can wring from reluctant trading partners.

While Japan's development strategy in the 1950s and 1960s—to shelter and protect its infant industries, to use all the power of the state to compel foreign economic interests to deliver the maximum at the least possible cost to domestic players—may have been appropriate to those times, the sophisticated, industrialized Japanese economy of the 1990s shares the same interests in open world markets that America has. Continued attempts to shift market outcomes to its advantage by coordinating the individual actions of its national enterprises is a recipe for the breakdown of free trade.

In the final analysis, Japan's tradition of creating *genkyoku*—government bureaucracies given jurisdictional authority over specific clusters of industries, each striving, as Ryutaro Komiya describes, "for its industry to be orderly and organized and for there to be no disruptions of any kind"—is incompatible with an open trading system based on market forces, however disorderly, disorganized, or occasionally disruptive they may sometimes be. Japan, ultimately, must make its own choice about where it will go, and the United States can only make clear what it perceives those choices to be.

American semiconductor trade policy is the first case in which we can clearly set some of these choices before the Japanese government. If MITI wishes to continue to offer administrative guidance to Japanese

The danger that a significant degree of monopoly power can be acquired and exploited in high-technology sectors as the result of such strategic policies, endangering the ability of otherwise competitive industries dependent on the targeted sector to compete internationally, is simply too great, and the possible costs for American economic performance too onerous, to be ignored.

industries, it is not unreasonable to insist that “affirmative action” be part of its agenda. In a world of administered national markets, market share goals are a reasonable trade for free access to our own large market. If that constricted world is the one we are to be forced to live in, we will inevitably raise the stakes and push harder for similar goals in other sectors, including the mushrooming Japanese computer market. But this will be the end of the line for open markets for high-tech products, and we had better begin building the crack new bureaucracy needed to broker deals for U.S. industries in the world’s markets.

If, instead, Japan wisely chooses to cast a firm vote for an open trading system, now is the time for MITI to make the initial gesture: to put its electronics and computer industry bureaus—with their detailed questionnaires, streams of visitors, and banks of telephones keeping bureaucrats abreast of the details of “their” companies’ operations—out of business. Industry bureau activities, such as administering R&D programs, that are not incompatible with competitive markets could be transferred elsewhere in MITI.

Public coordination, of course, should not be replaced by private cartelization. Antitrust laws must be enforced. We should continue to press for a larger and more aggressive Japan Fair Trade Commission, and we can improve our own efforts. The U.S. Justice Department can brush off a decade of cobwebs and more actively investigate anticompetitive activities by foreign (and domestic) corporations that restrain competition in the home market.

Over the long haul, a truly multilateral framework will be required to build the open trade in high-tech products that serves the common international interest. Key elements will include international standards on antitrust and competition policy and an enforcement body to give them teeth; negotiated reciprocity in access to nationally funded R&D programs (to remove R&D subsidies as a way of favoring national firms’ competitive position in global markets); and negotiation of an international framework for equitably sharing support for basic research—an international

public good—among the entire trading community. The recent experience of Europe in forging its unified post-1992 market shows that these principles *can* be implemented among a community of nations with very diverse political and economic institutions, but a shared interest in the benefits of open markets.

It is not in the cards to build a sweeping new system in the next three months, but we must start somewhere. To make it clear there will be no relapse into the past, we will be required to continue to apply pressure for change to our Japanese trading partners. Retaliatory duties are a transparent form of pressure, compatible with the open and competitive markets we strive for, and much to be preferred on purely economic grounds to the negotiated export restraints we often have settled for in our trade deals with Japan. But walls around our markets inevitably impose a cost on our own consumers.

Foreign market share goals, at least in the short run, may bring benefits to our companies without creating significant costs to our consumers (as long as chip sales are not limited by production capacity). However, this seductive absence of short-term cost to ourselves brings with it great peril—there will be little domestic political resistance to continuing with market share targets. We run the serious long-term risk of setting precisely the precedents that will gradually solidify into a de facto long-term system that will harm our own high-tech industries. It is absolutely crucial, then, that we tightly constrain our use of market share goals, perhaps making them annual in term, and link their removal quite explicitly to the construction of some common “rules of the game” for international competition in advanced technology.

We should let our Japanese partners know that if they are willing to sit down and work seriously with us to build a truly open trading system for technology-intensive goods, then we will happily drop demands for remedies that must be regarded as setbacks in the trend toward increasingly competitive global markets that has served the world economy so well over the past half century. ■

monopoly power can be acquired and
strategic policies, endangering the ability of other-
targeted sector to compete internationally, is
economic performance too onerous, to be ignored.

THE FAST TRACK

*Federal Agencies and the Political Demand
for AIDS Drugs*



The recognized epidemic of HIV, the virus that causes AIDS, is now a decade old. Although we now know of AIDS-related deaths as far back as the 1950s, it was only in 1980–81 that a few physicians treating homosexual men in New York and California began to notice an eruption of unusual diseases, the now-familiar opportunistic infections. June 5, 1991, will mark the tenth anniversary of the first article on pneumocystis pneumonia in Los Angeles—the acronym AIDS would not be coined until a year later—in the *Morbidity and Mortality Weekly Report*, published by the Centers for Disease Control. By now the CDC has found 160,000 Americans who meet its definition for symptomatic AIDS. Of those, about 100,000 have died. It is estimated that as many as 1 million people in the United States may have contracted the virus.

How well has the federal government performed in addressing this epidemic? That question continues to provoke sharp controversy. The answers necessarily vary according to the period, and the aspect of the biomedical and public health challenge, one is talking about. The answers also depend, as complex matters nearly always do, on the vantage point of the person answering. Defensive government officials naturally tend to give themselves more credit than do AIDS activists. Many activists, perhaps themselves stricken, or with friends, relatives, or loved ones lost to the disease, are understandably distraught and angry at the failure to intervene sooner and more effectively.

One central challenge posed by the HIV epidemic has been the quest for faster bureaucratic action. In particular, AIDS has generated substantial pressure to speed the availability of treatments and vaccines. Increased congressional funding has been one, but not the only, issue. Faster results require that the agencies receiving the money use it in ways that successfully hasten a variety of processes. And therein lies a tale of hopes frustrated and deferred. In their response to the AIDS crisis, the National Institutes of Health and the Food and Drug Administration have dramatically and distinctively transformed their structures and processes. But the new drugs that are the object of the reforms have been slow to materialize. And there is no reason to expect this state of affairs to change soon.

Demands for haste in making available AIDS drugs have concentrated on three areas of concern. First, could the NIH, the nation's primary custodian of basic biomedical research, sort through competing research ideas faster, getting the money to researchers without delay? Second, could the NIH and the FDA speed the discovery and clinical evaluation of potential vaccines and treatments for AIDS? And third, could the FDA, responsible for policing the safety and effectiveness of pharmaceutical products, "grease the skids" of the regulatory process, leading to faster approval for distribution of AIDS-related medications?

Institutional Context

Until the advent of the HIV epidemic, no one had ever looked to the NIH or the FDA for quick response to sudden public health emergencies. That was the job of the CDC. Quite simply, neither the NIH nor the FDA had been created, structured, staffed, or encour-

aged along these lines. The onset of a novel, complex, and fatal infectious disease that affected frightening numbers of people (many already affiliated with a political movement for "gay liberation") while allowing them to survive for weeks, months, or years with their affliction was almost certain to generate a persistent but frustrated constituency for decisive administrative response. Such a constituency was bound to perceive indifference and "failure" in organizations that had never been set up to do what they wanted done.

Although its 13 largely autonomous institutes are oriented mostly to particular diseases and organs, the NIH has long had a primary mission of basic, rather than applied, biomedical research, directed mostly at questions that university-based scientists, rather than disease victims or even government officials, deemed worth pursuing. And although it maintains a prestigious program of its own research, it has concentrated mostly on grants to and contracts with outside researchers, and has tended to look askance at efforts to direct the research of the larger scientific community; good ideas should, by and large, flow "up" to the campus at Bethesda, Maryland, rather than "down" from it. Political direction from Congress, urged on by various disease and organ constituencies, tended to come largely in the creation of new institutes and in the broad thrust of yearly budget allocations. Generally speaking, everyone, including Congress, disease lobbyists, and the public, had been reasonably content with this system. And well they should have been. For what it was designed to do, the system worked.

Nor was the Food and Drug Administration by tradition a "fast track" agency. On the contrary, the primary message conveyed to the agency by its political overseers for years before the HIV epidemic, and by some of the same people who now criticize it on AIDS, had been to "go slow." In hearing after hearing, year after year (and even today, for nearly everything *except* AIDS), Congress has told the agency mostly one thing: above all else, do not approve, or allow to remain accessible, products—whether foods, additives, drugs, or medical devices—that cause demonstrable harm to identifiable victims. (The invisible victims of drugs and devices *not* approved were scarcely to be heard from.) A telling exception in recent years came for so-called orphan drugs for conditions too rare to make it profitable for drug companies to develop and market them. In the 1983 Orphan Drug Act, Congress responded to the victims of these rare conditions by providing special incentives to companies to market such products. The large numbers of AIDS victims provided an even stronger challenge to the status quo.

Despite the change in process it required, the NIH and the FDA embraced fast tracking for AIDS because faster processing promised a concrete, plausible response to the epidemic. The real trick was to make haste in ways that did not unacceptably threaten the agencies' basic identities or compromise their core missions. With the political environment transformed by a growing number of AIDS victims, including noisy demonstrations and harsh rhetoric by the AIDS Coalition to Unleash Power (ACT-UP), the bureaucracies had strong incentives to search out strategies for

*Christopher H.
Foreman, Jr.*

*Christopher H.
Foreman, Jr., is a
research associate in the
Brookings Governmental
Studies program.
He is at work on a
forthcoming book,
Plagues, Products,
and Politics: Immi-
nent Public Health
Hazards and National
Policymaking.*

hastened response. For the NIH, it doubtless helped that HIV, one of a newly recognized and poorly understood class of retroviruses, would turn out to be scientifically interesting as well as a public health calamity. It also helped that fast tracking did not involve the sort of controversy over social values to which AIDS-related education proved vulnerable. But at both agencies, the mindset of top leaders was crucial. Former FDA commissioner Frank Young and Anthony Fauci, head of the National Institute of Allergy and Infectious Diseases (NIAID) since 1984, were among those to become convinced that faster processing was both possible and appropriate.

But all this naturally took time, of which impatient AIDS activists were chary. Although an implicit joint stake in a common general strategy would evolve, there was bound to be sharp disagreement over details and lingering resentment among AIDS activists over the time it had taken for the government to see things their way.

Faster Funding

Fairly soon after the epidemic was recognized, the NIH began to turn some of its own resources toward AIDS research by detailing scientists who had been funded to do other work. The National Cancer Institute started giving small awards to outside scientists as early as September of 1982. It issued the first AIDS-targeted request for grant applications in August 1982. The resulting grants were given in April of 1983. But the first NIAID request for contract proposals did not come until the fall of 1985. Those contracts were awarded in June 1986. Critics in Congress and beyond deemed that record unacceptable.

Getting money to researchers faster meant speeding up the selection of grant and contract recipients. The NIH made small stabs at this as early as 1983 by using mail balloting to avoid the delay inherent in convening busy outside scientists for peer review meetings. As the epidemic grew, so did demands for saving time. During its 1985 congressional reauthorization the NIH was strongly encouraged to process requests for research support more quickly. The presidential commission on the HIV epidemic delivered the same message in 1988. All along, NIH officials had debated whether and how to accelerate the review process.

In 1987–88, as Congress moved toward passage of major AIDS amendments in the Health Omnibus Programs Extension of 1988, NIH officials insisted that any speedup would have to be realistic. A few researchers, fearful that their applications might be doomed to hasty and incomplete consideration, had pressured the NIH the other way, requesting that no expedited procedures be used for their submissions. Ordinarily, on average, thirteen months elapse between the publication of a request for applications and the funding decision by the agency. The Senate Labor and Human Resources staff initially wanted to cut that time to six months. As finally enacted, the 1988 law requires that AIDS-targeted research funds be awarded not later than six months after the close of the three-month solicitation period. Thus, once an AIDS-related request is published in the weekly *NIH Guide for*

Grants and Contracts, the agency must announce its award within nine months.

This reform, aptly known inside the NIH as ASAP (Accelerated Solicitation to Award Program) has been a noteworthy, if somewhat unsung, success. Through ASAP the NIH has been able to do what proves far harder in the later stages of drug discovery: reliably dictate and monitor a set of concrete prescribed activities, coordinating them toward a definite and well-understood end. Accelerated funding turns out to be a relatively straightforward thing to conceive and, with sufficient effort, achieve.

Like the other scientific review committees the agency uses, members of the NIAID's 51-member AIDS Research Review Committee and the seven AIDS-focused "study sections" under the NIH Division of Research Grants come from outside the government. The committees are managed by, and their memberships largely reflect the judgment of, their executive secretaries, who are NIH staff scientists. The seven study sections review nearly all the smaller, unsolicited applications. The NIAID committee is generally responsible for more complex, multidisciplinary applications solicited through requests for applications. (Though the NIAID has the lead role, other institutes also fund AIDS research.)

That ASAP is successful does not mean that it is easy. The process is administratively complex. The NIAID program staff must determine an AIDS question it wants to pursue, draft and publish a request for applications, then evaluate the resulting lengthy submissions for their responsiveness to the published announcement. An executive secretary for the NIAID review committee—four are regularly assigned to it, and one to each of the seven study sections—will take about a month to examine them for completeness and to assess the kinds of expertise needed for competent scientific review. The applications are sent out to the committee members, who then have four to five weeks to study them and to prepare written comments. Then comes a committee meeting, an intensive two- or three-day session in Bethesda. For each application, the executive secretary must prepare a summary statement, reflecting the overall tone of the discussion and the particulars of the committee's judgment. These, and the final priority score, along with a revised budget estimate, go to each applicant. As is standard at the NIH, each review committee decision must then pass through an advisory committee (also well-endowed with scientific and technical expertise, though with a somewhat heavier political hand). Only then does the applicant get the call indicating whether funding is on the way.

Pitfalls and constraints abound. One problem is scheduling. Meeting dates have to be set long in advance to accommodate the scientists' calendars. These dates help to drive much of what comes earlier. A review committee's decisions and membership are also subject to challenge by any scientist disappointed at being turned down or having a budget cut or offended that a reviewer he or she deems unworthy was permitted to judge an application. And conflict-of-interest concerns shape both a committee's membership and

the review. An applicant's collaborators and institutional colleagues are disqualified from the review process, perhaps cutting into an already limited reservoir of expertise.

Nevertheless, the NIH has been able to assure that, with rare exceptions, the nine-month statutory target can be met *without* compromising the time available for scientific scrutiny. Much of its success has to do with simple administrative shortcuts. Additional executive secretaries can be assigned to conduct ad hoc review meetings if necessary to meet the ASAP deadline. If applications are numerous, or particularly complex, two executive secretaries may be assigned to the tasks ordinarily performed by one. The NIH also got approval from the Office of Management and Budget to request multiple copies of AIDS-related applications, thus saving several days otherwise necessary for copying and routing of paper. The thrice yearly receipt dates for the unsolicited AIDS applications reviewed by the study sections were set at January 2, May 1, and September 1, each a full month before others are due, allowing the recording and assignment units in the agency to operate for AIDS while administrative capacity is otherwise minimally stressed. The NIAID may also forewarn the scientific community of an impending announcement, thus giving potential applicants more preparation time. And the NIAID screens solicited applications early in the peer review process to eliminate all that are obviously not competitive.

Faster Research

Speeding up the research itself is more difficult. Important constraints are purely scientific and technical. But institutional and individual judgment inevitably plays a key role. And it is there that many AIDS activists and critics have a bone to pick with the government.

As numerous observers have pointed out, viruses have generally proven a tougher target for applied scientific effort than have bacteria. In 1988 congressional testimony, a vice president of the Pharmaceutical Manufacturers' Association noted that only seven antiviral drugs were currently available, including azidothymidine, or AZT, which was given FDA approval in early 1987 for the treatment of AIDS. Unlike bacteria, viruses do not remain essentially distinct from the cells of their "host." Rather, they invade a cell and subvert its processes toward making additional viruses. The trick is to interfere with the virus in a way that is tolerable for the host. The life cycle of HIV has several phases, any of which might theoretically be interrupted to thwart its spread. But one must do this reliably over time, among the many different "strains" of the virus at large, while minimizing harmful side effects among various vulnerable or infected populations. Fortunately, the human and animal immune systems can cope with many viruses, generating protection for at least some individuals that can serve as a starting point for vaccine development. Unfortunately, considerable uncertainty surrounds the extent of protective immunity in humans against HIV. The HIV virus's notorious capacity to mutate rapidly—other viruses such as influenza do so much more slowly if at all—is a critical

Speeding up the research itself is more difficult. Important constraints are purely scientific and technical. But institutional and individual judgment inevitably plays a key role. And it is there that many AIDS activists and critics have a bone to pick with the government.

The Traditional Clinical Trials Process for New Drugs

PHASE 1

The first stage of testing in human subjects, undertaken only after assessment both in test tubes (*in vitro*) and in animals (*in vivo*). This stage seeks basic data on toxicity, appropriate dosage levels, and the way the body distributes and breaks down the drug. The number of volunteers is small (often fewer than 100 people) and not randomized.

PHASE 2

Often the first stage of testing in patients. The tests focus on efficacy, side-effects, and alternative dose levels and dose schedules. Tests typically include hundreds of subjects. The study design may or may not be randomized and “blinded” (that is, subjects, and perhaps also the physicians treating them, are unaware of who is getting the experimental drug and who is getting a different therapy or a placebo).

PHASE 3

Large studies, often involving hundreds or thousands of carefully selected patients. This phase usually demands the greatest rigor in statistical methodology; placebo controls, blinding, and randomization are standard. Such studies generally pursue confirmation of earlier findings regarding safety and efficacy and provide the strongest comparative data on the experimental treatment versus others.

challenge, as is its ability to remain long dormant in cells before inducing disease. And vaccine researchers still have no good animal model for HIV. As science writer Peter Radetsky points out in a recent issue of *Discovery* magazine, vaccine researchers have been able to induce immunity to simian immunodeficiency virus (SIV) in the rhesus macaque, albeit under idealized and tightly controlled conditions. Infection with SIV quickly kills rhesus macaques. But the chimpanzee, which offers a more favorable model in its ability to contract HIV, does not, so far as anyone can tell, develop AIDS.

The biggest frustration in trying to speed the availability of vaccines and treatments for AIDS is that the policy tools available (more money, more scientists involved in the search, greater coordination, faster dissemination of research results) cannot guarantee success. What the NIH and, through it, elected politicians can do is twofold. They can make “bets” and offer incentives. That is, the government may make informed guesses about the most promising avenues for inquiry and then “wave money in front of people,” as one NIH middle manager put it, to entice enterprising scientists into contributing their effort. The overall NIH research strategy is to make the largest number of intelligent research bets possible, consistent with available resources. And intelligent bets are possible. The highly organized, interactive, and cumulative nature of modern science allows the NIH a reasonable prospect of doing considerably better than the typical gambler, whose every roll of the dice is unaffected by previous rolls. But no one can dictate drug development.

In pursuing treatments (as opposed to vaccines, which nearly everyone believes to be a distant goal for HIV) two general avenues of attack exist. One is to screen the repertoire of available substances, some of which have proven therapeutic effect for other ailments. The other is to develop new drugs. In either case, uncertainty abounds. The government has screened thousands of substances in the hunt for AIDS treatments. The overwhelming majority quickly proved useless. Some display anti-HIV activity *in vitro* but fail when tested in humans. In 1987, the year that AZT became the first and only approved antiviral AIDS treatment, some 3,000 substances were screened. NIH officials defend this emphasis on screening as appropriate given the agency’s existing capacity to screen potential anticancer therapies. They also point out that drug companies cannot necessarily be relied on to screen potential medications unless the proprietary stakes are sufficient. Drug companies need to earn profits.

Given the political environment spawned by the HIV epidemic, considerable second-guessing of the government’s decisions about which research to pursue was inevitable. Much of the rage by AIDS activists against the scientific establishment in general, and the NIH in particular, is of this sort. In a recent muckraking book, *Good Intentions: How Big Business and the Medical Establishment Are Corrupting the Fight against AIDS*, journalist Bruce Nussbaum argues that, far from being committed to aggressive pursuit of all pos-

sible therapies, government officials failed to study substances believed effective by some scientists and activists. Blinded by their training, by standard operating procedures, and by lack of faith in information from unorthodox sources, government officials failed, according to Nussbaum, to exploit avenues of attack that might have saved lives. Nussbaum points out, as if he were the first to notice, that scientific judgment can be, and has been, conflated with the pre-existing perspectives and interests of large institutions and the individuals inside them. Certainly. Students of public policy have long recognized that problem in policy-making everywhere, including some other realms (such as national defense) where lives are directly at stake. In essence, Nussbaum and some AIDS activists blame the NIH for not having been a different kind of organization from the beginning.

The list of AIDS drugs yielded by science is arguably paltry. AZT, highly toxic and of dubious effectiveness in some patients, remains the only formally sanctioned treatment for attacking HIV. Its development suggests one option (besides making available as much money as possible to as many smart scientists as possible) for hastening drug discovery: at the first sign of genuine success in a solid phase 2 clinical trial (*see definitions on p. 34*), move for FDA regulatory review and distribution, without waiting for the outcomes of further phase 2 or phase 3 trials. That is precisely what happened in September 1986, when a data safety and monitoring board recommended that the AZT trial be halted given the striking improvement in recipients' health. The drug clearly represented both a scientific victory (though it was an old cancer drug, yielded by early selective screening rather than new development) and a political boost for both the NIH and the FDA, which expedited its regulatory approval. The drug gave both agencies something to boast about.

But if positive research *results* have been slow to materialize, AIDS (and especially AIDS advocacy) has clearly led to considerable changes in institutional structure, procedure, and mindset, at least for this one disease. The NIAID's four divisions now include one devoted to AIDS. Anthony Fauci, director of NIAID and certainly the NIH official most visible to the public, serves as an NIH associate director for AIDS research, a position created largely to give both Fauci and the agency's AIDS activity a higher political profile. Under cooperative agreements that assure a strong partnership role for the agency, the NIH oversees numerous vaccine development and drug discovery groups. It also propels clinical trials of promising substances through nearly 50 research units participating in the AIDS clinical trials group. Although Fauci defended his agency's performance on opportunistic infections in testimony before the National Commission on AIDS in May of 1990, noting that one-third of the research protocols under the clinical trials group were directed at such infections, barely three months later the NIAID announced a new cooperative agreement for opportunistic infections, conceding that no applications for research in this area were coming to the existing drug discovery group. Some critics have long maintained that opportunistic infections are in-

herently less appealing than HIV itself to professionally ambitious scientists, and that the hoopla over AZT distracted the government from investigating the efficacy of other drugs.

Over the years AIDS activists have hurled perhaps their sharpest barbs at the traditional government approach to clinical trials. Government-funded biomedical research (like most fields of technical and specialized endeavor) had long been the province of an established network of researchers and institutions. Such networks tend to develop orthodoxies regarding procedure and standards of judgment. The reigning biomedical orthodoxy has emphasized, among other things, both meticulous attention to traditional research methodology and a reluctance to conflate research with other objectives, such as mass treatment. By traditional criteria, only patients meeting certain qualifications could be admitted to a trial, and some of those might, by the luck of the draw built into the research protocol, receive treatment inadequate to their ailments or even no treatment at all. In an epic (and ongoing) battle that historians, ethicists, and sociologists of science will doubtless ponder for many years, AIDS advocates have effectively challenged the establishment, both at the top in policy debates, and from below, through an insurgent movement toward "community-based" research that makes treatment available to as many people as possible. The establishment has not exactly capitulated, but it has clearly gotten the message. In the late 1980s it began publicizing more widely the availability of the trials under way. And now prominent scientists and statisticians are aggressively promoting creative ways to simplify, and thus speed up, AIDS clinical trials while simultaneously making them available to more patients.

Faster Regulatory Review

There are essentially two ways to hasten the regulatory process that leads to a drug's distribution. One is to contract the time or number of steps necessary for review, perhaps making available extraordinary resources on an ad hoc basis. That is what the government and the Burroughs Wellcome company did both to get AZT into trials and to hasten distribution once its effectiveness against HIV was determined. The other way is to circumvent review, at least partially, making drugs available before or during regulatory scrutiny. Both approaches are now FDA policy to a limited degree, with further evolution imminent, largely in response to the HIV epidemic. The great limitation of both approaches, and of any regulatory system, is that substances must exist before they can be reviewed. The paucity of AIDS drugs emerging from the regulatory process reflects mainly the number of drugs entering it. Experience shows that only a small fraction of all drugs put into small phase 1 tests for toxicity survive through the larger, more elaborate phase 2 and 3 tests for safety and efficacy. By January 1991, the FDA had formally sanctioned AZT and six other drugs for various HIV-associated maladies. Two additional therapies, one for pneumocystis carinii pneumonia and another for the parasitic infection toxoplasmosis, have been widely used by physicians treating AIDS-related

opportunistic infections even though the FDA did not originally approve these as “AIDS drugs.” Unfortunately, some reporters persist in referring to AZT as “the only” AIDS drug—more likely a result of sloppy writing than of journalistic bias.

In recent years various government officials and disease advocates have allied with supporters of regulatory relief for drug manufacturers to help propel three important reforms. One is expedited review (under a more flexible risk-benefit framework) of medications for life-threatening or severely debilitating illnesses. After Burroughs Wellcome approached the FDA to indicate interest in developing an anti-HIV

itself as helpful as possible to drug sponsors early in the development and evaluation process and to consider “the severity of the disease and the absence of satisfactory alternative therapy” when deciding on approval.

The second reform is the so-called treatment IND, through which an Investigational New Drug (one still undergoing preapproval clinical study) may be distributed to limited populations. Unlike expedited review, the treatment IND is supposed to serve merely as a “bridge” to final approval, allowing early access to promising therapies before all the data are in. The FDA has long had such power. Even before the agency’s rule on it became effective in June 1987, some 4,000 patients had received AZT in this manner. But, as Jeffrey Levi noted in a recent paper for the Institute of Medicine, the regulation eliminated some of the vagueness that had left more discretion with FDA regulators. The advent of the treatment IND rule did not presage a flood of new drugs, however. One congressional committee later complained that during the year after the regulation became final, only one drug, trimetrexate (for AIDS-related pneumonia), received treatment IND status. Since then other AIDS drugs that later won full approval have successfully crossed the treatment IND bridge. Right now, only trimetrexate and dideoxyinosine (ddI) are so designated.

A third and related reform, pending at this writing, is the so-called “parallel track” policy that originated in the AIDS activist community and received a sudden surprise endorsement by NIAID director Fauci in June 1989. As formally announced in May 1990 the policy would make promising new drugs available “through studies without concurrent control groups to monitor drug safety that are conducted in parallel with the principal controlled clinical investigations.” It would differ from the treatment IND in at least two major ways. First, the government contemplates that expanded availability for promising drugs might be permitted even “when the evidence for effectiveness is less than that generally required for a treatment IND.” Second, the parallel track policy would apply only to AIDS drugs. A major concern has been to craft the policy so that the availability of drugs outside of clinical trials does not rob drug sponsors of their ability to recruit trial participants.

Just as a rifle cannot fire without ammunition, so no approach to expedited review can work unless the drugs exist. But once a drug exists it has a ready-made and vocal constituency that has proved capable of extracting considerable flexibility from the regulatory bureaucracy. Thus, in June of 1989 the FDA for the first time based approval of a drug (aerosolized pentamidine to prevent pneumonia) entirely on data from community-based research. The following September the secretary of health and human services announced the early release of ddI, an anti-retroviral drug that showed signs of helping patients for whom AZT was not an option. Now activists are pushing for FDA licensing of both ddI and dideoxycytidine (ddC) even though (and to some extent precisely because) clinical trials have been slow to proceed. Both drugs are currently getting to some patients under a less scientifically demanding version of the treatment IND: the open study protocol.

*One feature of these
developments is surely
worth stressing. Every-
thing recounted here
happened without the
jawboning or head-
bashing of a designated
“AIDS czar.”*

product in early 1985, the agency began to communicate closely with and to assist drug developers, though as Bruce Nussbaum points out, some have benefited more than others. In September 1986, the FDA established a special 1-AA classification to give AIDS drugs top priority in the review process. Sensitive both to business concerns and to the plight of the desperately ill, the presidential Task Force on Regulatory Relief, chaired by Vice President George Bush, requested the FDA, in August of 1988, to formalize a policy for “expediting the marketing of new therapies intended to treat AIDS and other life-threatening illnesses.” The agency published an interim rule to this effect the following October, and expedited review is now agency policy (although it still awaits formal regulatory clearance by OMB). Under this policy, the FDA is to make

No Czars Need Apply

The NIH and the FDA have embraced ideas for speedier drug review and patient access that probably only a handful of desperate patients, business representatives, and efficiency-crazed academics would have supported a decade ago. The change became possible as agency leaders were convinced that it was politically supportable—some would say irresistible—and reconcilable with (if not entirely unthreatening to) the core world views of their respective bureaucracies. Faster drug availability has been pursued, if not always attained, through novel approaches to research proliferation and regulatory review, with a generous dash of administrative reorganization and corner-cutting thrown in.

The result of all this effort is that more than 90 different AIDS drugs are today in various phases of clinical trials around the country, with 9 different substances now formally approved to treat aspects of the disease and subpopulations among AIDS victims (see table 1). Whether this record is impressive depends, of course, on one's point of view; absent a vaccine or, even better, a true "cure," AIDS activists understandably profess to be unimpressed. After all, as the National Commission on AIDS recently noted, critics complain that most FDA-approved drugs for AIDS and AIDS-related opportunistic infections have been developed outside the NIAID clinical trials program.

One political and administrative feature of these developments is surely worth stressing. Everything recounted here happened without the jawboning or head-bashing of a designated "AIDS czar." Sandra Panem, in her book *The AIDS Bureaucracy*, recommends that "responsibility and leadership for managing a novel health emergency [such as AIDS] should be centralized and assigned to a federal official." This argument, offered when virtually any new but persistent national policy challenge arises, takes as its premise that only someone "prominent and visible" and bearing the capacity to "cross turf boundaries" can harness the will and resources to meet the challenge. It turns out, however, that it has taken no czar to make progress against AIDS or to push the bureaucracy to make progress possible. It is far from clear that we would be further along with a czar to prod us. In fact, some critics, such as Diana Dutton and her colleagues in *Worse Than the Disease: Pitfalls of Medical Progress*, have made exactly the opposite claim. They contend that only a far greater role for "the grassroots" can spare us the threats to our health wrought by the biases of an untrustworthy technocratic elite.

In keeping with our political structure and political culture, AIDS fast tracking has combined ad hoc coordination at the top with limited insurgency from below. The result suggests possibilities for collaborative policy innovation without either czardom or anarchy. The messiness and uncertainty of the process derive from a familiar source: the difficulty of mixing the right personal and institutional incentives with enough technical skill to yield even reasonable approaches, much less solutions, to complex policy problems. ■



Table 1: Drugs Available to AIDS Patients

DRUG	APPLICATION
FDA-APPROVED	
Azidothymidine (AZT)	Anti-retroviral drug
Erythropoietin	AIDS-related anemia
Pentamidine (aerosolized)	Pneumocystis carinii pneumonia (prophylaxis)
Pentamidine (injectable)	Pneumocystis carinii pneumonia (treatment)
Ganciclovir	Cytomegalovirus (CMV) retinitis
Interferon alpha	Kaposi's sarcoma
Fluconazole	Candidiasis; cryptococcal meningitis
Bactrim/Septra	Pneumocystis carinii pneumonia
Pyrimethamine	Toxoplasmosis
TREATMENT IND	
Trimetrexate	Pneumocystis carinii pneumonia
Dideoxyinosine (ddl)	Anti-retroviral drug
OPEN STUDY PROTOCOLS	
Dideoxyinosine (ddl)	Anti-retroviral drug
Dideoxycytidine (ddC)	Anti-retroviral drug

Source: Food and Drug Administration; the AIDS Clinical Trials Information Service.

The Tattered Safety Net

Gary Burtless

Gary Burtless is a senior fellow in the Brookings Economic Studies program. He is the editor of A Future of Lousy Jobs? The Changing Structure of U.S. Wages (Brookings, 1990).

The U.S. economy entered recession at the end of 1990. But the nation's unemployment insurance system—the chief government program protecting jobless workers against the effects of recession—has emerged from the 1980s battered and the worse for wear. The share of unemployed workers collecting unemployment benefits is lower than it has been at the onset of any postwar recession. The fraction of long-term unemployed who can expect to collect benefits is far below the fraction that received benefits in recessions over the past two decades. And the after-tax value of an unemployment check is sharply lower than its value in the past four recessions.

Historically, unemployment insurance has served two main functions. First, it offers laid-off workers critical income protection during temporary spells of joblessness. For many low-wage workers, particularly those suffering from long spells of unemployment during recessions, it is the only program separating them and their families from poverty. The second function of the system grows directly out of the first. By helping protect the income, and thus sustain the ordinary spending habits, of jobless workers, the system gives the economy a needed boost during recessions. Unemployment insurance is one of the economy's most important automatic countercyclical stabilizers: spending on benefits climbs rapidly when the economy falters, and it shrinks almost as fast when good economic times return.

Changes in the system over the past decade have eroded the value of unemployment insurance both as income protection for the unemployed and as an automatic stabilizer. With recession upon us, the inadequacies of the system have been brought into sharp focus.

Growing Unemployment, Shrinking Benefits

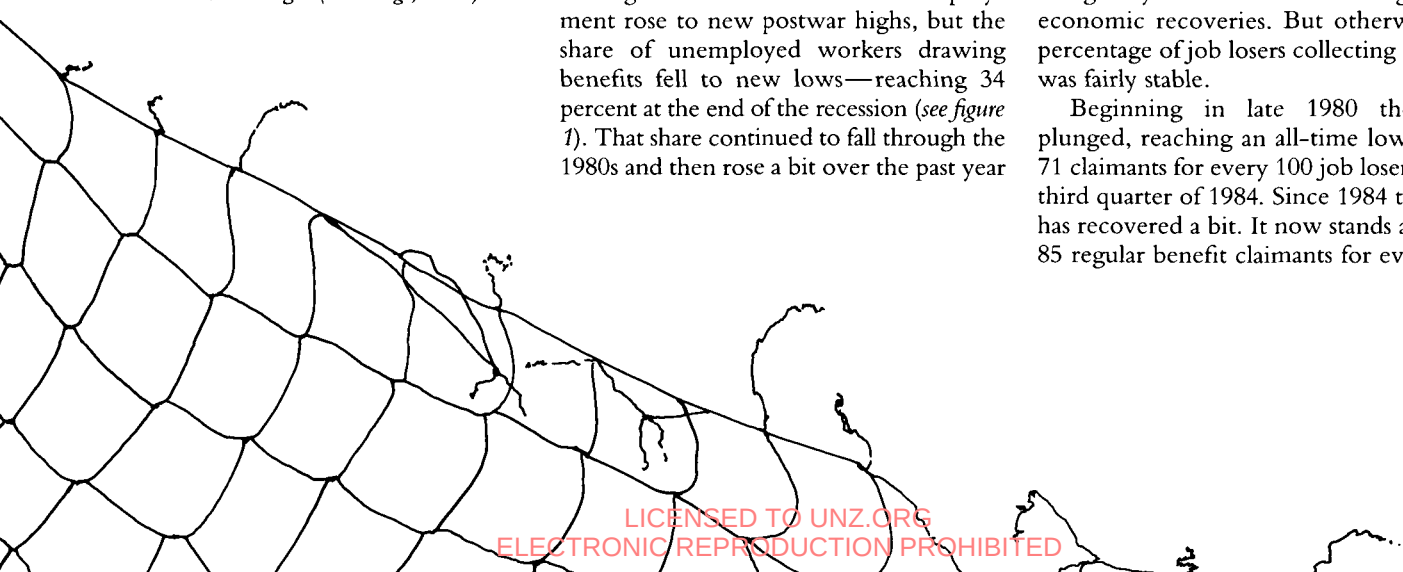
During the 1981–82 recession unemployment rose to new postwar highs, but the share of unemployed workers drawing benefits fell to new lows—reaching 34 percent at the end of the recession (see figure 1). That share continued to fall through the 1980s and then rose a bit over the past year

but still remains well below levels before 1981.

Today roughly one-fifth fewer workers who have lost their jobs are collecting benefits than we would expect based on historical experience before 1981. The U.S. system of unemployment insurance does not provide benefits to all who are unemployed. It insures only workers with recent employment experience. The Bureau of Labor Statistics divides unemployed workers into four categories depending on the reason for their joblessness. The four types of unemployed are new labor market entrants, reentrants, voluntary job leavers, and job losers. New labor market entrants and most unemployed who are reentering the job market after a prolonged absence are not eligible to receive benefits. Workers who voluntarily leave their jobs may not be eligible for benefits or may be eligible only after a specified waiting period, such as six or ten weeks. Thus the overwhelming majority of workers eligible for benefits will be those who are unemployed because they are on temporary layoff or because they involuntarily lost their last job. Ordinary jobless benefits—so-called regular state benefits—are limited to the first 26 weeks of a spell of unemployment. Jobless workers most likely to be insured are therefore involuntary job losers who have been unemployed less than six months.

Figure 2 shows the percentage of job losers who receive regular state benefits. Specifically, it shows the number of benefit claimants for every 100 job losers who have been unemployed less than six months. Between 1967 and 1980 there were about 108 regular benefit claimants for every 100 short-term job losers. The ratio moved a bit over the business cycle, rising early in recessions and falling during economic recoveries. But otherwise the percentage of job losers collecting benefits was fairly stable.

Beginning in late 1980 the ratio plunged, reaching an all-time low of just 71 claimants for every 100 job losers in the third quarter of 1984. Since 1984 the ratio has recovered a bit. It now stands at about 85 regular benefit claimants for every 100



short-term job losers. In spite of its recent recovery, however, the ratio remains well below its level before 1981, and even below its level early in the 1981–82 recession. The current recession is one in which the unemployment insurance system could provide benefits to a historically low percentage of workers who lose their jobs.

How Did It Happen?

The decline has several explanations. For one thing, the composition of the unemployed has changed. In addition, fewer workers now apply for benefits when they lose their jobs. The drop in coverage is also due to a change in unemployment insurance eligibility requirements, which are established at both the state and national levels.

Joblessness now affects different demographic groups, industries, and regions than it did early in the postwar period. Compared with jobless workers in the 1950s, today's unemployed are more likely to be young, to be new labor market entrants, or to have worked in service industries, which are often not well covered by unemployment insurance. In addition, more Americans have moved from the North and Midwest to the South and West, where eligibility requirements are more strict. Workers who lose their jobs in many southern and western states are less likely to collect benefits than their counterparts in the older industrialized states. But the changing nature and geographical distribution of unemployment can explain only a small part of the decline in insurance coverage over the past decade. The share of jobless workers collecting benefits has dropped in every region and nearly every state in the union.

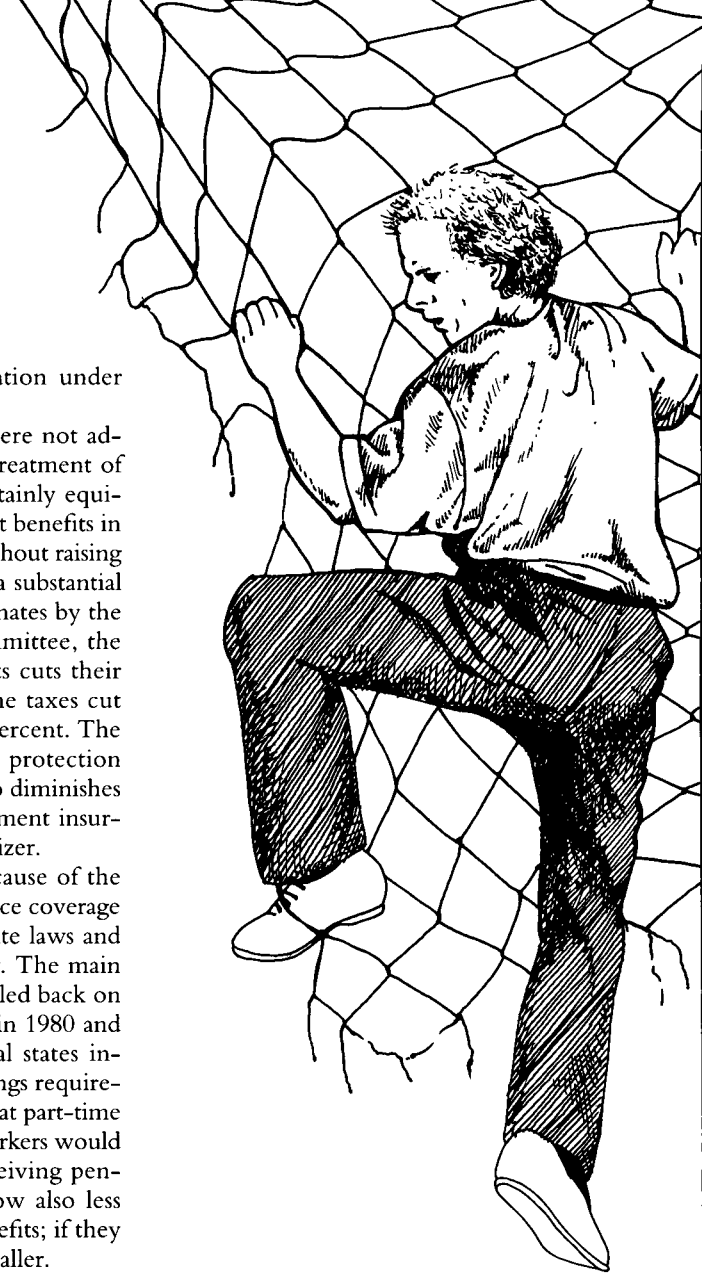
Several changes in the system during the 1980s reduced the attractiveness of applying for benefits. One was the change in the tax status of benefits. Until 1979 unemployment benefits were exempt from all income taxes. Beginning in 1979 benefits were taxable only for taxpayers with incomes above certain thresholds. In 1983 the income thresholds were lowered to \$12,000 for single people and \$18,000 for married couples filing jointly. The 1986 Tax Reform Act made all unemployment

compensation subject to taxation under the personal income tax.

Benefit levels, however, were not adjusted to reflect the new tax treatment of jobless pay. Although it is certainly equitable to include unemployment benefits in the tax base, taxing benefits without raising benefit levels is equivalent to a substantial benefit cut. According to estimates by the House Ways and Means Committee, the federal income tax on benefits cuts their value 16 percent. State income taxes cut their value an additional 2–4 percent. The cut not only reduces income protection afforded jobless workers, it also diminishes the effectiveness of unemployment insurance as a countercyclical stabilizer.

An even more important cause of the drop in unemployment insurance coverage is the reform since 1979 in state laws and regulations affecting eligibility. The main changes took place as states scaled back on benefits during the recessions in 1980 and 1981–82. For example, several states increased their base period earnings requirements, lowering the chances that part-time or intermittently employed workers would become insured. Workers receiving pensions or severance pay are now also less likely to receive insurance benefits; if they do, benefits are likely to be smaller.

Why did so many states take the unprecedented step of tightening eligibility requirements in the midst of a severe recession? One reason is that most states entered the 1980 and 1981–82 recessions with small trust fund reserves. These reserves, from which most unemployment benefits are paid, are derived from a payroll tax imposed by each state on employers within its border. As unemployment insurance trust funds were exhausted in the early 1980s, state legislatures were forced either to raise payroll taxes or to slash benefits to restore their programs to solvency. During the previous recession of 1974–76, few states felt pressure to slash benefits. Many had borrowed freely from the federal Treasury to keep benefit payments flowing. But under legislation passed in 1981, the Treasury began imposing interest charges of up to 10 percent a year on new borrowing. The interest charge put greater pressure on states to take



Jobless Pay in the United States

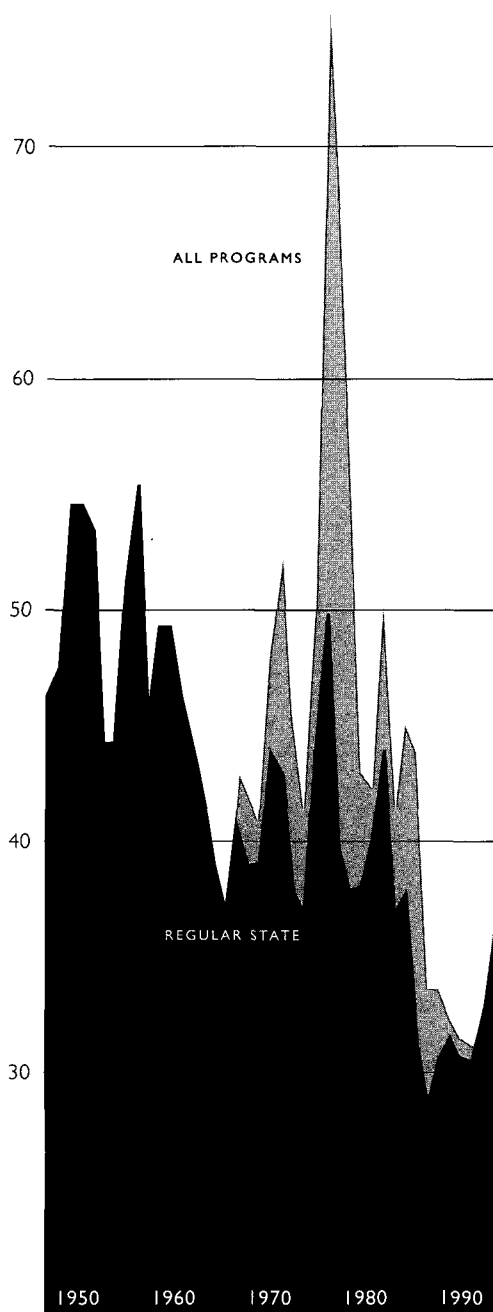


Figure 1. Share of Unemployed Workers Covered by Unemployment Insurance, Regular State Programs and All Programs, 1950–90

PERCENT OF UNEMPLOYMENT

Source: U.S. Department of Labor. Data on all programs not available before 1967.

immediate steps to ensure that their trust funds did not fall far out of balance.

States were not obligated to restrict eligibility or slash benefits, of course. They might have raised the payroll taxes imposed on employers. Many of them did so. But the anti-tax climate of the past decade made it hard for legislators to raise taxes enough to keep their systems solvent. Moreover, as labor unions have weakened, the voice of jobless workers has become much fainter in most state capitals. The views of business lobbying groups remain very influential. The result is a bias against raising employer payroll taxes and in favor of restricting benefits.

One bit of good news is that most state trust funds entered 1991 in pretty good shape, primarily because of the long economic recovery over the second half of the 1980s. Most states entered the recession with reserves healthier than they were in 1980, and state legislators will not find themselves immediately pressed to trim benefits further. Still, reserves are lower than they were at the start of the 1970 and 1974–76 recessions, and the anti-tax climate is even stronger at the state level today than it was in the early 1980s. If state trust funds face insolvency during the next couple of years, many state governments will turn to the same remedy they used in the 1980s: curbs on eligibility.

Whether states decide to raise taxes or reduce benefits, however, the consequences for the economy will be the same. Shoring up trust funds in the middle of a recession will weaken the economic stimulus provided by the program. The time to boost reserves is during an economic expansion, not a contraction.

Protection for Long-Term Joblessness

During past recessions the unemployment insurance system offered routine protection to workers suffering long-term joblessness. Through the extended benefit unemployment program, the system provides 13 weeks of benefits beyond the usual 26 weeks to workers who exhaust regular benefits and who live in states with extremely high unemployment. The catch is, a state's insured unemployment rate (the number of recipients of regular benefits divided by the total number of jobs covered by the unemployment system) must be high enough to trigger these extended benefits. Because of changes in the regular unemployment program and reforms in the extended benefit trigger mechanism, the insured unemployment rate is unlikely to rise high enough to trigger extended benefits. For practical purposes, the ex-

tended benefit program has now virtually ceased to function.

An important reason is the drop since 1980 in the share of job losers collecting regular unemployment benefits. Because of that drop, the insured unemployment rate is considerably below the civilian unemployment rate. In 1982, for example, when civilian unemployment averaged 9.7 percent, insured unemployment was just 4.6 percent. In December 1990, when civilian unemployment reached 6.1 percent, insured unemployment was 2.9 percent. But it is the insured unemployment rate, not the civilian unemployment rate, that triggers extended unemployment benefits in a recession. As a result, the economy can deteriorate and civilian unemployment soar, yet the insured unemployment rate remains so low that the extended benefit program either fails to go into effect or does so only late in the downturn. Moreover, even where extended benefits are available, the insured unemployment rate often falls below the critical threshold relatively early in an economic recovery. Jobless workers get dropped from the insurance rolls after 26 weeks even though the job market remains extremely weak and prospects of finding work are slim.

A second reason for the weakness of the extended benefit program is changes in federal law enacted in 1981. Before 1982 recipients of both regular and extended benefits were included in the count of insured unemployed. Extended benefit recipients are now excluded, effectively raising the level of insured unemployment needed to keep the extended benefit program turned on. Also, before 1981 the extended benefit program could be triggered in all states if the national insured unemployment rate exceeded 4.5 percent. The national trigger rate was eliminated by the 1981 legislation. Beginning in October 1982, extended benefits have been available only in states in which the insured unemployment rate exceeds 5 percent and is at least 20 percent higher than the rate over the previous two years. Some states also provide benefits when the insured unemployment rate reaches 6 percent, regardless of the rate in previous years. These threshold rates are 1 percentage point higher than the comparable rates in effect before 1982.

The effect of these changes has been dramatic. During the 1974–76 recession, when unemployment reached a high of 9.0 percent, all 50 states offered extended benefits during at least part of the recession. By contrast, at the end of 1982, when unemployment reached 10.8 percent, a

postwar high, only 14 states with particularly high insured unemployment rates offered extended benefits. By October 1983, with unemployment still hovering around 9 percent, only 2 states and Puerto Rico offered extended benefits. As a practical matter, the extended benefit program is no longer an effective automatic stabilizer. Except in extraordinarily severe recessions, the program is unlikely to offer benefits to a sizable number of long-term unemployed.

The obvious solution is to find a new extended benefit trigger. Any serious candidate must meet three criteria. It must specifically reflect the labor market situation of workers insured by the system. It must be available in a timely manner, either weekly or monthly. And it must be available on a state-by-state basis. Although the civilian unemployment rate is accurate and timely, it cannot be calculated on a uniform basis for all 50 states. The civilian unemployment rate is estimated from the Current Population Survey, a monthly survey of U.S. households that is too small to permit accurate estimation of state unemployment rates except in the 11 largest states. A different measure of local unemployment must be used for the remaining 39 states.

Given existing limitations in state-level unemployment data, the best trigger must depend on a combination of information about civilian unemployment and state-level insured unemployment. One candidate, sometimes criticized as unreliable, is the Bureau of Labor Statistics' estimate of the state unemployment rate. The Bureau's estimate is based in part on information from the Current Population Survey and in part on administrative data from a state's unemployment insurance program. When the state unemployment rate rises above, say, 7 percent, states could be required to offer at least seven weeks of extended benefits. States with BLS-estimated unemployment rates above, say, 9 percent could be required to offer seven additional weeks of extended benefits, bringing the total weeks of extended benefits up to fourteen in states with exceptionally high unemployment.

A simpler reform would be to reduce the current insured unemployment trigger rates enough to make the extended benefit program approximately as generous as it was before 1981. Reducing the critical threshold rate about 1.5–1.8 percentage points would accomplish this goal. One weakness of this procedure is that the extended benefit program would remain vastly unequal across the 50 states. States in

the South and West typically have lower insured employment rates than states in the Northeast and Midwest because they make it more difficult for job losers to collect regular unemployment benefits. Thus in a recession that is equally severe all across the nation, Massachusetts and Michigan might offer extended benefits when Florida and Texas did not. To eliminate this inequity it is necessary to move away from insured unemployment statistics in triggering extended benefits.

But the first step is to get the extended benefit program working again, however imperfectly. At the very least we should avoid a recurrence of the experience of the early 1980s, when the extended benefit program shrank even as unemployment—especially long-term unemployment—rose to new postwar highs.

Is This the Protection We Want?

Never a heavyweight among unemployment insurance systems in the industrialized world, the U.S. program entered the current recession a 97-pound weakling. The combined effects of declining coverage rates, income taxation of benefits, and the virtual extinction of the extended benefit program can be summarized briefly. Compared with the benefits it offered during recessions in most of the postwar period, unemployment insurance now provides about *one-third* less income protection and countercyclical stimulus.

Nearly all the shrinkage in the program occurred, virtually unnoticed, in the early 1980s at a time when far smaller proportional cutbacks in public assistance, disability insurance, and social security caused loud public outcries. Perhaps because so much policymaking for unemployment insurance takes place in state capitals rather than in Washington and because the constituency of the program is not highly visible or articulate, cuts in jobless benefits provoked little reaction among federal policymakers, journalists, or the wider public.

Whatever the source of the program's continuing bad fortune, a vital task for policymaking in the coming months is to restore the system's capacity to deal with severe recession. In the long run, it would also be useful to consider alternatives to the current method of financing unemployment benefits and of setting eligibility requirements and benefit levels, which vary widely (and capriciously) from one state to the next. In the short run, however, policymakers should be content to repair the grave defects in the extended benefit program. The system desperately needs a boost if its effectiveness is to be restored. ■

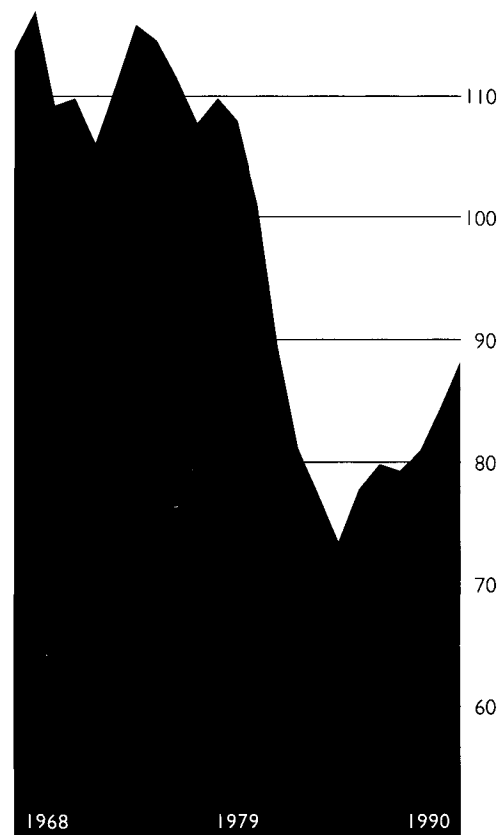


Figure 2. Number of Regular Benefit Claimants for Every 100 Short-Term Job Losers, 1968–90

Source: U.S. Department of Labor.

BUILDING

COURTS, CONGRESS, & GUIDE -

Robert A.
Katzmann

On those occasions when the U.S. Senate undertakes its constitutional responsibility to confirm or reject presidential nominees to the Supreme Court, the eyes of the nation are riveted on the process. The senatorial inquiry into the fitness of the candidate for a seat on the highest court in the land is the stuff of high drama, and the interaction between the senators and the nominee is intense and momentous. It is also short-lived. As Senator Arlen Specter remarked to one such nominee, Judge Robert Bork, during the latter's confirmation hearing, "This is the only time that anyone gets to talk to a Supreme Court nominee or to a federal judge.... So...if you're confirmed, we'll never have a chance to talk to you again."

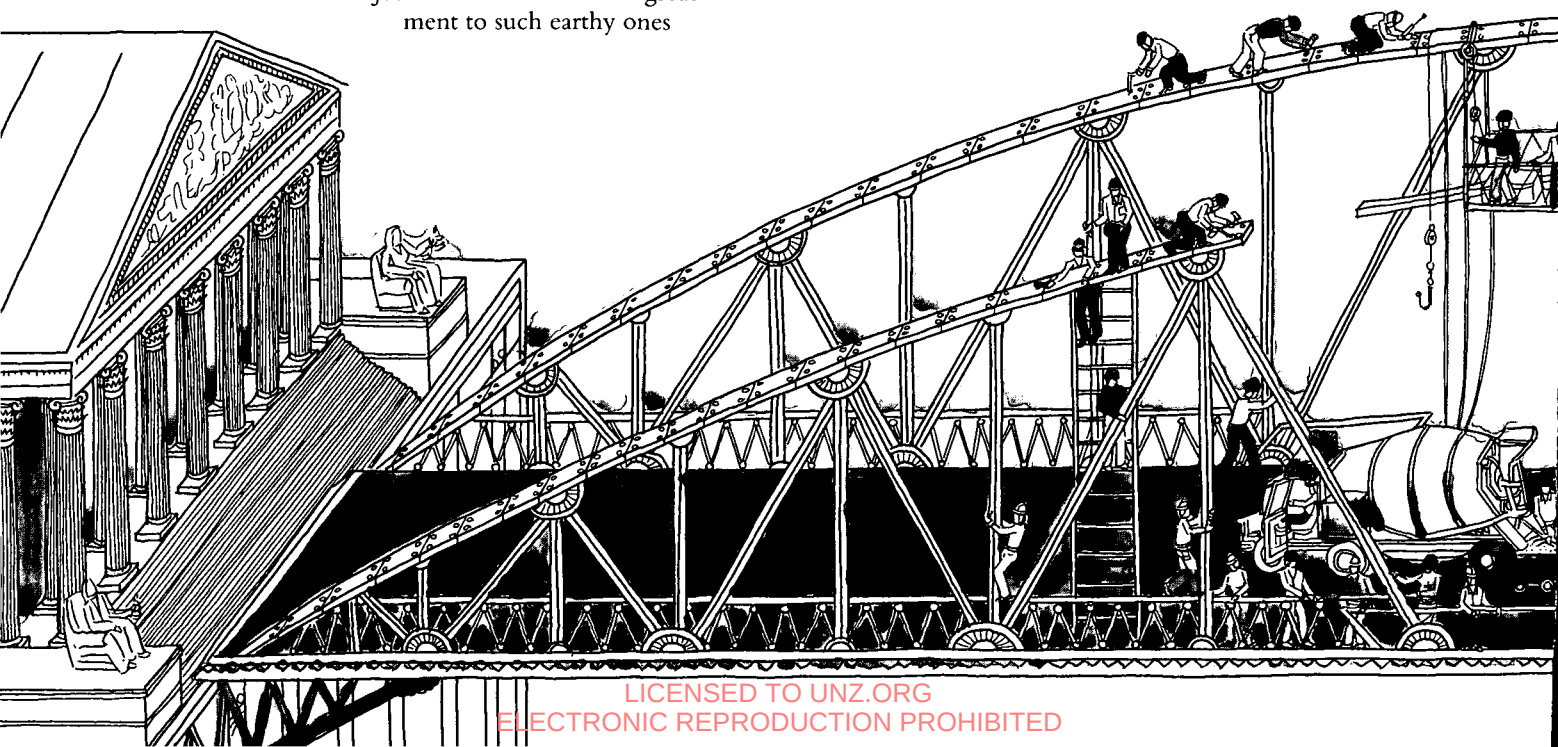
The point is starkly true. Except during the judicial confirmation process, legislators and judges seldom communicate directly with each other. And the costs of that "estrangement," observed Judge Frank M. Coffin in his *Federalist* essay, can be severe for both branches and for public policy in general.

The courts and Congress affect each other in many ways. Congress can influence the "administration of justice" through laws governing the structure, function, and well-being of the courts. It is Congress, after all, that creates judgeships, determines court jurisdiction, sets judicial compensation, and provides for attorneys' fees. Through the criminal and civil laws it enacts, Congress has given the federal courts jurisdiction in legislation covering more than 300 subjects—from matters of great moment to such earthy ones

as the Standard (Apple) Barrel Act. The judiciary, in turn, can shape the course of legislation. Indeed, as Judge Abner J. Mikva has remarked, how courts interpret statutes has become as important to the legislative process as any single part of that process.

I wrote in *Judges and Legislators* that partly because of the lack of ongoing communication, Congress often considers bills that explicitly add to the courts' duties without first consulting the judiciary. So it was when Congress began thinking about whether to vest the regional courts of appeals with jurisdiction over veterans cases. Congress also passes laws, not specifically about judicial administration, that affect the courts' workload. The landmark Americans with Disabilities Act, for example, left open, ultimately to judicial decision, the meaning of such terms as "reasonable accommodation." But Congress gave no apparent attention to the effect of the flood of litigation on the judiciary.

As the process by which Congress enacts laws has become murkier and more complicated, courts have had increasing difficulty weighing the various parts of the legislative record. At times, in the good faith effort to make sense of the problems before them, they may interpret statutes in ways that Congress did not intend. Not infrequently,



BRIDGES

LINES FOR COMMUNICATIONS

the legislative branch bitterly responds that the courts have mangled legislative intent and imposed their views on society.

Better communications could overcome some of those misunderstandings. In part, the judiciary has been reluctant to maintain a greater presence because of the need to avoid prejudging issues that might come before it and because of constitutional barriers against issuing opinions about proposed bills in advance of their passage. Judges are so conscious of the need to remain above the political fray that they are hesitant to get involved even in matters strictly confined to the operation of the courts. In a recent colloquy about communication between the two branches, one U.S. District Court judge said it would be wrong for him to get on the telephone and tell a senator that his court had a vacancy that needed to be filled.

Searching for Guidance

The quest for ways to bridge the chasm between courts and Congress begins with written sources—the Constitution, statutes, and codes of ethics.

Beyond prohibiting the court from issuing advisory opinions, the Constitution itself offers few clues about the character of relations between Congress and the

courts. It certainly says nothing directly about communications. What can safely be said is that the separation of powers doctrine does not mandate complete separation. If the executive branch were suddenly to decide that it was inappropriate for it to communicate with Congress, pandemonium would break out on Capitol Hill.

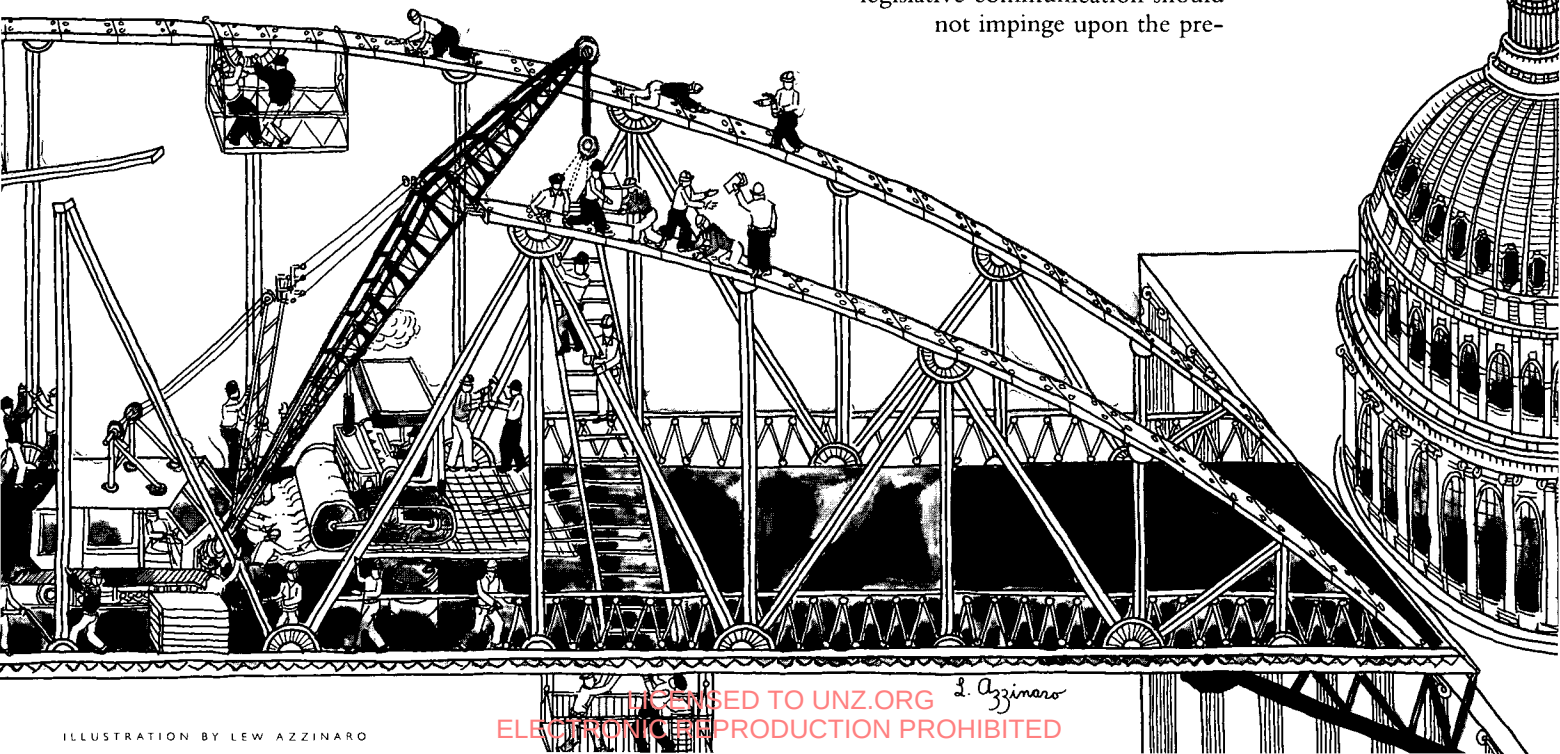
As far as statutory guidance, the Department of Justice has interpreted a federal law regulating lobbying activities as permitting judges to use appropriated money to contact legislators and congressional committees to convey their views on legislation. For their part, the Model Code of Judicial Conduct, prepared under the auspices of the American Bar Association, and the code of conduct for U.S. judges do not deal expressly with judicial interaction with Congress; neither do they prohibit it.

At the very least, it can be said that the Constitution, statutes, and code of ethics do not require the gulf that separates the courts and Congress.

Judging the Propriety of Communications

If we are to encourage and routinize communications between the branches, it would be useful to devise guidelines governing exchanges—one of the subjects I explore in a forthcoming book. Such guidelines will necessarily be subjective and open to disagreement, but at least a few benchmarks would seem unobjectionable. First and foremost, judicial-legislative communication should not impinge upon the pre-

Robert A. Katzmann is president of the Governance Institute and a visiting fellow of the Brookings Governmental Studies program. He is grateful to A. Leo Levin, of the University of Pennsylvania School of Law, and Russell Wheeler, of the Federal Judicial Center, who led the Governance Institute workshop on Court-Congress communications at the Woodrow Wilson International Center.



A JUDICIAL PERSPECTIVE

It is self-evident that these two institutions will impact on one another in a dozen different ways. Yet, for whatever strange reason, each institution tends to be miserably unacquainted with the problems faced by the other. Each is in the habit of complaining about Congress's inability to draft an intelligible statute or about the way judges will run off with the most explicit language and turn it on its head in pursuit of private agendas.

Judge James L. Buckley

Proceedings of the 49th Judicial Conference of the D. C. Circuit

Federal Rules of Decision, 1989

rogatives of either branch consistent with constitutional values, and should leave unimpaired the institutional integrity of both. It should honor the sanctity of the judicial process, with its ideals of independence, impartiality, and absence of partisanship. It should preserve the reputation for judicial competence. As a kind of negative benchmark, judges and legislators should subject to the strictest scrutiny any contemplated communications that to a reasonable, informed person could appear to run counter to those norms.

We can best understand the opportunities for and limits of communication by considering these benchmarks in the context of actual circumstances in which the subject and form of the exchange conjoin in a variety of ways. Among the possible subjects of inter-branch communication are judicial administration, specific court cases, statutes, or extra-judicial matters. The subject could be one particularly within the competence of the judiciary, one about which the judiciary does not have exclusive competence, or one that is outside the judiciary's institutional competence.

As to form, numerous avenues for judicial expression exist, both direct and indirect. Direct communication would include legal opinions, judicial testimony at legislative hearings, telephone conversations between judges and legislators and their staff, and personal visits between judges and members of Congress. Indirect communication would include a judge's article in a law review, a speech before a professional group, a response to a media inquiry. It would also be possible to use a surrogate, such as the American Bar Association.

In some cases the subject of a communication could present no problems in itself, but, offered in a particular form, could pose difficulties. Consider the case of a judge with unquestioned competence in a particular subject testifying before a congressional committee about funds needed to implement a remedy. Among the difficulties facing the judge would be the need to avoid making a commitment or bargain that would violate the norms of the judicial process and the need to avoid prejudging issues that could come before the

court. Another risk is that the legislators would take offense at the judge's unwillingness to make commitments or prejudge issues. In deciding whether to testify in such a case, a judge must ascertain whether direct communication is essential or whether the message could be conveyed by other means—through surrogates, for example, or through law review articles. Face-to-face contact probably offers both judges and legislators the best opportunity for learning, and, over time, as each side reaches some understanding about the kinds of questions that are appropriate, such direct communication would gradually come to carry with it less risk. But in the short term, those risks must be taken into account as judges and legislators determine the circumstances in which they can interact.

Some 18 months ago, at the Woodrow Wilson International Center, representatives of the judicial and legislative branches met to explore a wide range of scenarios involving communication about judicial administration, cases, and statutes. In the following, I draw on scenarios and discussions skillfully developed by Russell Wheeler and Leo Levin.

Communication about Judicial Administration

Because it directly involves the operation of the courts, judicial administration—the number of judgeships, salaries, appropriations for courthouses, jurisdiction of the courts, the rules of evidence, civil and criminal procedure—is a domain in which the judiciary has special competence and can best represent its own interests before Congress. It is not simply that the courts and Congress alike would benefit from judicial involvement; without it, Congress would be deprived of information necessary for its deliberations. Such judicial communication does not bear upon the courts' adjudicative functions and thus does not carry with it any of the traditional concerns—of prejudging issues or rendering advisory opinions—that might bar it.

Comments by judges about court operations are almost certain to occur in nonadjudicative settings that offer appropriate forms of expression—testimony at

hearings, speeches, law review articles, commissions concerned with court operations. The judiciary should not feel constrained about initiating legislative proposals, given that by statute the U.S. Judicial Conference, the policymaking body of the federal judiciary, is to make recommendations to Congress about judicial work. One idea worth exploring is having the Chief Justice, drawing upon the institutional committees of the conference, deliver a "State of the Judiciary" address to a joint session of Congress.

Exchanges between courts and Congress about the administration of the federal courts would thus appear to satisfy criteria for communication. But what if a judge, perhaps at a congressional hearing, is asked to offer views about a subject affecting not only the operation of the courts but other institutions as well?

A judge testifying in support of a bill that would shift jurisdiction of diversity cases—those involving a controversy between citizens of different states or between a citizen of a state and an alien—to state courts goes on to say that Congress should increase federal revenues, perhaps through more aggressive tax collection, to provide funds to allow state courts to handle the increased jurisdiction. It is undeniable that federal judges have expertise about the effect of diversity cases on the federal courts; they should be able to testify as to whether diversity jurisdiction should be retained, modified, or abolished. To argue in support of shifts of diversity jurisdiction, though, will inevitably raise questions about the effects of those changes on other courts. Given the choice, federal judges might prefer not to comment on the operation of the state courts, leaving it to state judges to address the issue. But it would be unrealistic to assume that legislators would not raise the matter. The issue for federal judges in such cases is whether the integrity of the federal judiciary would be affected were they to address matters not particularly within their expertise. Also at question is comity among the judicial systems in the federal polity. Perhaps federal judges should try to consult with the state judiciary, and, while not representing

its views, present them to the extent they are known.

Federal judges discussing federal court administration must also be attentive to the risks of encroaching on areas in which they do not have institutional competence. For example, although it would be appropriate for a judge to project the costs of resources needed to implement a new federal judicial function, advancing proposals about how such funds should be secured is a question for Congress to decide as it assesses the full range of national needs, purposes, and programs and makes trade-offs among them.

I have defined federal judicial administration in terms of the care and feeding of the courts. Some might argue that it also has to do with the selection of judges. That issue could arise in a variety of contexts. If a congressional committee solicits a judge's view about the fitness of a judicial nominee, how should the judge respond? Obviously any such inquiry requires a balancing of interests. On the one hand, having had experience on the bench, a judge could offer some insights about the candidate. On the other hand, a judge who favors or opposes a nominee risks being perceived as politically self-interested and as seeking to impose a particular judicial philosophy. Another risk is the difficulty of maintaining amicable relations with a candidate confirmed despite the judge's opposition. Judges deciding whether to make their views known to Congress might do well to find out whether other responsible individuals or groups—members of the bar, professional colleagues and clients of the nominee—can provide the same information or perspective. A judge who decides to respond to a congressional inquiry should do so publicly, just as the integrity of the judiciary demands that opinions, once arrived at, be made publicly available.

In another circumstance, a senator who is considering the elevation of a district court judge to the court of appeals asks the chief judge of the district court for an evaluation. Although the same considerations would apply as in the previous scenario, the situation is different in that the views of a chief judge

A CONGRESSIONAL PERSPECTIVE

A radical restructuring of the relationship between the branches is not necessary, but each branch should give priority to institutional reforms. If the judiciary and the Congress are to interact intelligently, each has to understand the activities of the other. And, by necessity, this understanding must incorporate improved channels of communication which contribute to rational decision making and to reasoned listening.

Congressman Robert Kastenmeier

Report of the Federal Courts Study Committee, 1990

about such factual, objective matters as whether the prospective nominee disposes of his or her cases in a timely manner would be relevant.

A third, and quite different, circumstance is one in which a sitting judge initiates contact with a senator to offer views about a prospective candidate. For a judge to take that initiative magnifies the problems, particularly the risk that the judge will be perceived as attempting to influence the legislature. Prudence suggests that if a judge provides views about a nominee, it should be done at a legislator's request.

Communications about Cases

Recent confirmation hearings of Supreme Court nominees Robert Bork and, to a lesser extent, David H. Souter are examples of circumstances under which

The process of judicial selection must be structured so that the president, the Senate, and the public have enough information about the nominee to ensure that he or she satisfies basic criteria, however defined. On the other hand, that process must preserve the integrity of the judicial function.

Confirmation hearings are one of a variety of ways by which senators can determine whether to confirm a nominee. Certainly, it is reasonable to expect senators to inquire about the nominee's underlying judicial philosophy, to learn something about the quality of mind and thought by which a nominee approaches problems and makes decisions. Through skillful questions, legislators can engage nominees in lengthy discussions about their perspectives and values, about their views on such important principles as precedent. Hearings may be especially useful when the nominee has had no prior judicial experience and the senators cannot study prior opinions.

As the inquiry proceeds into judicial philosophy, it may be appropriate to ask about settled doctrine and cases. For example, questions about the nominee's views about *Brown v. Board of Education* would be proper. But queries and answers about cases that are still under adjudication would generally not be prudent. A judge should render a decision after full consideration of the facts, examination of precedent, attention to the briefs and oral argument, and discussion with colleagues (in appellate settings) and clerks—an often lengthy, painful process in which a judge might change course several times before reaching a final result. To compel a nominee to prejudge issues runs counter to the norms of judicial decisionmaking.

A limited and narrow exception to this admonition against asking questions and offering answers about unsettled doctrines could be made for a nominee who has already expressed his or her views. To be sure, the line between settled and unsettled doctrines may not always be clear. But given the wide range of questions that might properly be asked about so many areas of the law in the effort to understand the nominee's approach to judging, it does not seem too much to caution discretion about questions about cases and doctrines as yet unresolved.

Communication about a particular case could involve testimony before Congress by a sitting judge. Although the stricture against prejudgment prohibits a judge's commenting on a pending case, what if Congress is concerned not so much with a judicial ruling as to liability, but with the remedy decreed by a court to redress harm—for example, restructuring prisons, schools, mental health facilities? Such a legislative inquiry relates to an ongoing aspect of a case and presents a dilemma.

For example, a judge has jurisdiction over a civil rights suit brought on behalf of inmates in a prison. Invited by a legislative appropriation subcommittee to testify about a bill to provide grants for capital improvements in prisons, the judge is asked to comment on the types of grants that would be most helpful. On the one hand, the judge has had much experience confronting the problems of institutional reform. She may not only offer the legislators a unique perspec-

WHAT'S WRONG WITH PREJUDGMENT?

Perhaps there are...judges who, on hearing the essential facts of... a case, can confidently announce a sound decision without pause. I have seen professors in the classroom so respond; also panelists, lecturers, and cocktail pundits. But I am thankful that nothing said under such circumstances affects the rights of parties. Judges do have their share of excellent talkers. The best of them are called brilliant. Brilliance, however, seems to me more associated with the pyrotechnics of speech and writing; as the word suggests, it has to do with how thoughts can be made to shine and sparkle. Sound decision, on the other hand, is more than result; it is an edifice made up of rationale, tone, and direction. It is faithful to the past, settles the present, and foreshadows the future. Such a decision is rarely made quickly.

Judge Frank M. Coffin

The Ways of a Judge, 1980

judges and judicial nominees might be asked about specific cases—cases still before the court, cases before courts in other jurisdictions, and those already decided. At the heart of any effort to ascertain the kinds of questions and answers that legislators and judges can appropriately expect of each other must be some shared understanding of the unique role of each.

The Constitution clearly provides a role for the president and the Senate in the selection of judges. At the same time, the founders sought to create a system in which the independence of the judge would be ensured. By providing for life tenure, they substantially isolated federal jurists from public pressure, giving them the freedom to make unpopular decisions. The founders recognized the peril of putting judges in positions that could compromise their impartiality.

tive, but also, in response to questions, may dispel possible misunderstandings that the legislators might have about the particular remedy. It is precisely because legislators rarely seek their views that judges should try to be responsive to such a congressional invitation. On the other hand, the case is ongoing. The judge risks involvement in what could effectively become a bargaining session with legislators who may disagree with the court's remedy. If a judge offers views about legislation bearing upon remedies of the sort the court promulgated, it is not unreasonable to assume that some legislators might raise questions about the judicial remedy. Once again, the judge must exercise prudence about whether to testify. One consideration is whether someone else, for instance a special master, could advance the same points as effectively.

A final scenario would be one in which a judge comments, or is asked to comment, about a case before another court. That the case is in another jurisdiction at the time does not mean that similar litigation will not come before the judge's court at some point. Traditional concerns about prejudging issues would argue against commenting on such a case.

Communication about Statutory Revision

As courts interpret statutes, they may identify a host of technical problems. Some may involve questions of grammar, such as misplaced commas and ambiguous adjectives. Others could involve technical gaps, such as failing to state which courts have jurisdiction over cases that could be brought under the statutes. As Congress revises a law, a judge who has had experience interpreting it might wish to bring technical problems to the attention of the legislature. During congressional reauthorization of the Clean Air Act, for example, it would be appropriate for a judge who has decided several Clean Air Act cases to identify technical problems in sections having to do with emission standards. To offer substantive judgments about what emissions standards should be would go beyond the judicial function and impinge upon the legislative one.

In an effort to alert Congress to relevant statutory opinions, the Governance Institute, stimulated by judges James L. Buckley, Ruth Bader Ginsburg, Abner J. Mikva, and Patricia M. Wald, is assisting the U.S. Court of Appeals in a pilot project that would collect and sort statutory opinions of that court, then circulate them to appropriate congressional committees.

Extra-Judicial Communications

Judges come to the bench with a variety of professional experiences—in government, business, academia, and law—as well as personal interests beyond the courtroom. They share with all Americans an interest in the affairs of the country. Do they also share the right to make the legislature aware of their views? The nub of the matter is whether judges are restricted from communicating with the legislature about extra-judicial matters—something that they could unquestionably do but for their official role.

From one point of view, a judge who is particularly knowledgeable about a subject could add much to the legislative discussion; to prohibit such a com-

munication could deprive the legislature of a useful perspective. Thus, judges should be encouraged to become involved in the life of their community in ways that do not conflict with their judicial responsibilities. On the other hand, the danger exists that no matter how hard individual judges may try to step out of their official role, the public will see them not simply as private citizens, but as members of the third branch of government; indeed, a particular issue may gain some prominence precisely because a judge has become involved. If so, the judiciary itself risks becoming implicated. Moreover, the institutional health of the judiciary may suffer if judges are perceived as using their public positions for private ends. Finally, judges who testify might have to recuse themselves from matters coming before their courts.

PLUS ÇA CHANGE...

JUDICIAL-LEGISLATIVE RELATIONS IN NEW YORK STATE, 1921

Legislature and courts move in proud and silent isolation.... On the one side, the judges, left to fight against anachronism and injustice by methods of judge-made law, are distracted by the conflicting promptings of justice and logic, of consistency and mercy, and the output of their labors bears the tokens of the strain. On the other side, the legislature, informed only casually and intermittently of the needs and problems of the court, without...systematic advice as to the workings of one rule or another, patches the fabric here and there, and mars often when it would mend.

Judge Benjamin Cardozo

Harvard Law Review, 1921

A judge balancing these considerations must weigh a variety of considerations. The first is whether it can be made clear that the judge is speaking as a private citizen, not as a federal judge. In a world in which appearances are as important as reality, there should be no possibility that a reasonable, informed individual would misconstrue the personal communication to the legislature as a communication by the judiciary. The second consideration is whether the judge's claim to speak to the issue is so obvious that there would be no question as to competence. The third is whether the judge is realizing any benefit other than that common to everyone. The fourth is the extent of possible controversy surrounding the subject in question.

The range of possible scenarios is wide. A judge who is an avid archaeologist would like to testify about

COMMUNICATION BETWEEN COURTS

AND CONGRESS WILL NOT ELIMINATE TENSIONS

ROOTED IN DIFFERENT INSTITUTIONAL ROLES.

a bill to regulate private digging on privately owned lands. A judge who is a committed environmentalist would like to discuss a bill that would declare a stretch of land a national wilderness. A judge who is an amateur marksman would like to testify about gun control legislation. A judge who served as assistant secretary of state for Latin American affairs wishes to talk about aid to the Sandinistas. Obviously, some of these subjects are more controversial than others. Some are so visible that the risks for the judiciary might be increased were the public to fail to understand that the judge was speaking only as a private citizen. What is required of a judge here is prudence, a sensitivity to perceptions.

Another consideration is whether another branch of government requests the testimony, advice, or service. When a judge responds to a request, the danger that the individual judge or the judiciary will appear self-serving could be diminished. One can certainly conceive of circumstances in which the presence of a nationally respected judicial figure might be important. One such is in the wake of a national tragedy, as when President Lyndon Johnson asked then Chief Justice Earl Warren to head a special commission investigating the death of John F. Kennedy.

Congressional Exchanges with the Courts

Communication, as former Congressman Robert W. Kastenmeier observed, is a “two-way street.” Legislators should be able to convey their views to the judiciary, consistent with the foregoing criteria and discussion. An important question is how to do so. Are there ways beyond the enactment of laws and exchanges at hearings for legislators to communicate with judges? Legislators can, of course, make speeches in Congress, which the judiciary might monitor. But that forum may not involve the interaction that fosters mutual understanding. Perhaps committees of the Judicial Conference, the policymaking arm of the courts, could invite legislators to offer their views about legislative matters at committee meetings.

The recently established National Commission on

Judicial Discipline and Removal could also explore means by which legislators might bring to the attention of the judiciary complaints from constituents about the conduct of individual judges.

Conduits of Communication

In matters of judicial-legislative communication, the messenger can rival the message in importance. One highly valued messenger is the Judicial Conference, which meets twice a year and makes recommendations to Congress on matters affecting the courts. But can individual judges offer their views to Congress independently of—even in opposition to—the Judicial Conference? When the Judicial Conference makes a recommendation, it has special weight. As a tactical matter, it makes sense for a judge who wishes to advance a legislative proposal to secure first the support of the Judicial Conference. Certainly, institutional comity suggests such a course whenever possible. In some circumstances, however, the Judicial Conference might choose not to take a position on a particular piece of legislation; in others, it might take one contrary to that of individual judges. In these situations, the judge who wishes to communicate his views to Congress may weigh a variety of considerations, including the role of the Judicial Conference and the importance of the matter itself.

In the final analysis, the federal judiciary is not a monolith; no institution within it can speak authoritatively for every judge. The Judicial Conference is owed deference because of the experience of its members and because of the careful process by which it deliberates. Any judge who charts a course different from the Judicial Conference is not likely to do so lightly. But the Judicial Conference cannot compel adherence to its views on legislative proposals about judicial administration or prevent any judge who would take issue with it from doing so. Chief Justice William Rehnquist himself recently urged Congress to adopt a course with respect to death penalty appeals that the Conference had rejected. As judges communicate with Congress, they may want

to draw upon staff in the Administrative Office of the U.S. Courts charged with monitoring the legislature.

Judges can also communicate with legislators through surrogates, such as the bar, the news media, and the executive branch. The judiciary has the best sense of its own interest and, whenever possible, should be encouraged to present its case. The risk that Congress will misunderstand the judiciary's message is arguably increased when the message is refracted through the prism of surrogate institutions with their own interests, priorities, and agendas. Indeed, if the surrogate is the sole representative of the judiciary's recommendations and if it stands to benefit from them, especially in a material way, there is a danger that the legislature will tend to slight the substantive merits of the recommendations even if they prevail. The focus of the legislators' attention will be less on the message than on the messenger. Still another problem with depending exclusively on third parties is that they may be unwilling to serve.

To conclude, however, that the judiciary should try whenever possible to represent its own interests is not to say that surrogates do not have an important role to play. Quite the contrary. It is only to argue that careful consideration should be given to the circumstances in which the surrogates are called upon to perform.

Bar associations, for example, have been of service supporting greater resources for the courts. They are in some ways in a better position to push for such assistance than are the courts, which might be perceived as being special pleaders. Similarly, an executive branch that gives thought to the problems of administering justice from the perspective of the entire legal system could also be a crucial ally of the courts. The news media, through its reports, commentaries, and editorials, could also help bridge the gap between the courts and Congress.

The point, then, is not to substitute surrogates for the courts, but to use them to supplement the court's direct efforts to communicate with the legislature.

Promoting Ongoing Exchanges

Courts and Congress are not only formal structures, but also collections of human beings. If judges and legislators are to bridge the gulf between them, to overcome misunderstanding, then is there not some value in finding ways for them to come to know each other?

One opportunity that already exists is the Brookings-sponsored Administration of Justice biannual conference, at which selected representatives of the executive, legislative, and judicial branches meet over a weekend. Another step could be something as simple as meeting informally over lunch with a structured agenda—not to discuss cases, but to explore ways to improve relations between the branches. Another could be for a neutral forum, which would bring together judges, legislators, and personnel within each branch, to sponsor dinners, lectures, and discussions. Finally, new members of Congress and their staffs could participate, as part of their orientation, in seminars on the judicial process, perhaps offered by those who work in the federal court system. In the same vein, new judges, law clerks, and staff attorneys could take part in workshops on congressional lawmaking.

Opening Doors

Communication between courts and Congress will not eliminate tensions rooted in different institutional roles. But, at the very least, it can break down the groundless fears and suspicions that distance spawns. The multiplicity of circumstances and the interplay of a host of variables affecting judicial-congressional interaction suggest the peril of prescribing absolute rules governing communication—a series of “thou shalts” and “thou shalt nots.” But expanding contact under appropriate conditions could have the practical effect of promoting not only the good faith upon which governance depends, but also the effective workings of government that the founders envisioned. ■

**BUT, AT THE VERY LEAST, IT CAN BREAK
DOWN THE GROUNDLESS FEARS AND SUSPICIONS
THAT DISTANCE SPAWNS.**

Patriot: Savior of the SDI?

BY JANNE E. NOLAN



Will the success of the Patriot anti-tactical ballistic missile in blunting Iraqi SCUD missile attacks revive support for the ailing Strategic Defense Initiative? Just by demonstrating that a defensive system can work, some argue, the Patriot's performance in the Persian Gulf war has led to "a growing feeling the SDI has been vindicated," as Congressman John Kyl (R-AZ) put it. Thus encouraged, the administration is asking Congress for a \$2 billion increase in SDI funding this year, almost twice the total amount appropriated last year.

What is the relationship between Patriot and SDI? Substantively, not much. The Patriot is an anti-aircraft system with a limited capability against short-range missiles. Developed by the Army in the mid-1980s, the Patriot is everything the SDI is not: technologically prosaic, low-cost, with a modest mission and a low political profile. Indeed, the program survived successive congressional budget cuts only because of intervention by a few legislators motivated largely by constituent interests.

The SDI, by contrast, is a grandiose, multibillion dollar concept for exotic space- and ground-based technologies that has incited nonstop partisan controversy for almost eight years. As envisioned by Ronald Reagan, the SDI was to shield the United States from massive nuclear attack by Soviet intercontinental ballistic missiles, a mission that unfortunately could not be backed up by technology. Trying to make the program more "realistic," the Bush administration announced a scaled-down version of the SDI earlier this year. Known as Global Protection Against Limited Strikes, or G-PALS, the system is intended to protect the United States against a few incoming missiles from an errant Soviet commander or

from a third world country. Involving multiple layers of space- and ground-based interceptors, G-PALS is a technological and political compromise between supporters of futuristic space technologies and those who have been advocating immediate deployment of mature technologies.

Even G-PALS is controversial. Its deployment would spell the end of the Anti-Ballistic Missile Treaty, the 1972 agreement between the United States and the Soviet Union to restrict missile defenses. The abrogation of the ABM treaty could scuttle any hopes for reductions in Soviet strategic forces under the Strategic Arms Reduction Talks (START) agreement. Some estimates suggest the system could cost more than \$50 billion in five years. It is not clear that the experimental technologies needed to deploy the system will perform as advertised. And there is no agreement about the seriousness of the threat G-PALS is supposed to counter. Chairman of the Joint Chiefs Colin Powell said recently that he was "not terribly concerned" about surprise attacks from the Soviet Union, and China is the only potentially hostile third world power with missiles that can reach the United States.

In a few short weeks, the Patriot achieved what the SDI could never do by winning broad bipartisan support for the idea of a defensive system. Secretary of Defense Dick Cheney, realizing the SDI "needed a winner," took control of Patriot and other theater missile defense systems away from the Army and gave it to the SDI Organization late last year. How will that move affect the future of tactical defenses? According to one congressional observer, the association with the SDI may be "the kiss of death." The SDI's exaggerated

political profile already has done more harm than good to the prospects for strategic defenses.

Questions about the effectiveness of tactical defenses may become more pointed in the glare of the political spotlight. Has the promise of Patriot been exaggerated? How valuable is a system that can intercept slow-flying, inaccurate missiles, a few at a time? Some third world countries, including Saudi Arabia and India, already have missiles that would overwhelm the capabilities of the Patriot. Plans for new tactical defense systems are in the works, but at what cost? The current tactical defense budget already exceeds \$600 million a year and is expected to grow substantially over the next few years.

And which U.S. allies should be given the defensive system? Before the outbreak of the Gulf war, Saudi Arabia, Egypt, Bahrain, and the United Arab Emirates, along with Israel, were slated to buy Patriot batteries. The Israeli government opposes sales to Arab countries, fearing that they would erode Israel's air defense superiority. Defenses could prove regionally destabilizing if adversarial countries move to counter their enemies' defenses by adding to their offensive arsenals.

The desirability of defenses depends on the system and its mission. One has to ask, "What can it protect, against what threat, and at what cost?" The urgency of protecting against a third world missile or a mad Soviet commander, in turn, can only be gauged by comparing those threats with other security threats, the countering of which would have to be deemphasized in favor of defenses. A national debate about defenses grounded in such realities would be a welcome relief from the near-theological character of the SDI debates of previous years. ■

Janne E. Nolan is a senior fellow in the Brookings Foreign Policy Studies program. She is the author of Trappings of Power: Ballistic Missiles in the Third World (Brookings, 1991) and is currently at work on The Formulation of Nuclear Strategy.

The Anomalous Recession

BY GEORGE L. PERRY



Wars have usually been good for the U.S. economy. Traditionally they bring with them rising output, low unemployment, and full use of industrial capacity as military demands add to normal economic activity. This time, for the first time, war and recession occurred together. What does this anomaly tell us about the recession and its likely course from here?

For starters, the traditional stimulus that war procurement provides to an economy has been muted because the Persian Gulf war was fought out of the inventory of planes, tanks, guns, and missiles that had been built up during the Cold War. Although the costs associated with personnel, troop movements, and construction in Saudi Arabia enlarge total government spending, they add only moderately to the demand for current domestic production. Some of the hardware inventory will be replenished eventually, adding to orders of defense contractors and to economic activity. But that effect has been small thus far.

While the absence of a big procurement buildup can explain the absence of a wartime boom, it does not explain the presence of a wartime recession. The prime war-related suspect for that has been the runup in oil prices that began as soon as Iraq invaded Kuwait last August. Certainly the OPEC price hikes of 1973 and 1979 brought on the recessions of 1973-74 and 1980-82. But the analogy between the post-invasion increase and those earlier ones is not convincing. The OPEC price shocks depressed the economy both by reducing real incomes, like a higher excise tax would, and by forcing the Federal Reserve to raise interest rates to fight inflation. This time these effects have not added up to much.

At their peak in the fourth

quarter of 1990, higher oil prices had reduced consumers' real income by about 1.5 percent. Although sizable, the drop was less than half as big as the real income decline of the two previous OPEC price shocks. What is more, it lasted only a short time. Oil prices peaked in October and were back to pre-invasion levels in February.

If oil prices have had little effect on the economy by way of real incomes, they have had even less effect through inducing tight money. Consumer prices rose at a 6.4 percent annual rate between June and December, with about 3 percentage points attributable to higher oil prices. But the Fed reacted with equanimity, presumably because it saw the inflation risk as small relative to the recession risk. From July through October, the federal funds rate, the overnight interest rate that indicates the Fed's policy stance, ranged between 8 percent and 8¼ percent, just where it had been throughout the first half of the year. By November, the funds rate was falling as the Fed moved actively against recession. Perhaps it would have eased a little sooner or a bit more aggressively if it had not been for higher oil prices. But, unlike many past recessions, this one was not caused by the Fed raising interest rates.

If the Gulf crisis did contribute to recession, it did so mainly by depressing consumer attitudes and spending in an expansion already weakened by overbuilding and problems in the nation's banking system. Between July and this January, the Consumer Confidence Index of the Conference Board declined by 51 percent, while the less volatile Index of Consumer Sentiment of the Survey Research Center fell 24 percent. Some argue that these declines in attitudes simply reflect higher oil prices and the

emerging recession rather than the Gulf crisis itself. However, attitudes headed down as soon as the crisis began and before any sign of recession; they dropped more than one would have expected based on past recessions; and they failed to recover this winter despite the retreat in oil prices. Part of the deterioration in consumer attitudes thus appears distinctively connected to the Gulf crisis and the uncertainties that have surrounded it.

Because of its atypical origins in problems in the nation's banks, in overbuilding, and in consumer attitudes, some fear the present recession will not be easily ended. Such fears, however, seem groundless. Although problems at the banks increased worry and uncertainty this fall, and made it harder for some smaller borrowers to get loans, they have not dried up the flow of funds to the larger economy as some had expected. The apparent sensitivity of consumer attitudes to news from the Gulf should now help consumer spending revive. And except for construction, where overbuilding will reduce activity for several quarters, the economy does not appear to be pathologically depressed in a way that would keep it from responding to stimulus. So conventional economic remedies, like the lower interest rates already in place, should end this unconventional recession. ■

George L. Perry is a senior fellow in the Brookings Economic Studies program. With William C. Brainard, he directs the Brookings Panel on Economic Activity and edits its journal, the Brookings Papers on Economic Activity.

The Home Front

BY EDWIN DORN



War in the Persian Gulf briefly revived a dormant debate over who defends America. Critics of the all volunteer force charged that military recruiters exploit the economic desperation of minorities and poor whites, and that the AVF's resulting composition made its use more likely.

Defenders of the all volunteer force responded that enlistees are, after all, volunteers; no one is compelled to join. That rejoinder is correct as far as it goes, but it does not explain why young blacks are twice as likely to volunteer as young whites.

As with any political debate, this one is fraught with hyperbole. We need to reel in the errant facts, keep our logic straight, and frame the issues carefully.

The all volunteer force, which came into being in 1973, does have a different composition—both by class and racially—than the draft-era military. As critics have charged, few college graduates populate its rank-and-file. But neither are many high school dropouts in evidence. Compared with the military during the Vietnamese war and earlier, today's force is recruited from a narrow band on the socioeconomic spectrum. Although enlistees are not economically privileged enough to afford college, neither are they members of a desperately disadvantaged "underclass."

It is unfair, therefore, to characterize today's enlistees as "economic conscripts," young people forced to choose between destitution on the streets of our inner cities and combat danger in the sands of Kuwait. Considering the civilian employment options available to today's high school graduates—generally, low-wage service sector jobs with little long-term career potential—the military is an eco-

nomically rational choice; and it is a choice.

Before describing enlistees as economic conscripts or "victims," one should take time to talk with them. Generally, one would find that they care less about their origins than about their destinations. They see the military as a source of enormous opportunity and themselves as professionals trained to fulfill an important responsibility.

The all volunteer army also has far more blacks—20 percent of all active duty forces and 30 percent of the active duty Army—than did the draft-era military. Other minority groups are not over-represented. Hispanics, who are about 8 percent of the U.S. population, are less than 5 percent of the active force.

Roughly 25 percent of this country's Desert Storm contingent was black, so if the war with Iraq had resulted in heavy U.S. casualties, about one-fourth of them would have been black. With blacks only one-eighth of the civilian population, the sacrifice would have been disproportionate, and grounds for resentment.

Those blacks who were most outspoken (or at least most widely quoted) about the Persian Gulf crisis tended to be those who opposed administration policy. It was these voices of opposition that echoed in Congress on January 12, when Congressional Black Caucus members voted overwhelmingly against the resolution authorizing war.

On the whole, the black community was ambivalent about administration policy. Public opinion polls revealed that whites strongly supported the use of force against Iraq; blacks were evenly divided. High U.S. casualty rates could easily have turned that ambivalence into opposition, however, in a community that felt it had

borne the brunt of Reagan-era cuts in domestic programs.

Most of the time, of course, the nation is not at war. Even when it is, only a small percentage of military personnel are actually engaged in combat. As a statistical matter, a black soldier in the Gulf war was not at significantly greater risk than a young black man living in one of our drug-infested inner city "war zones."

That is the real tragedy, and the one that the Bush administration has failed most miserably to address. The administration was unequivocally committed to ending Iraq's invasion of Kuwait, but seemed to equivocate about using more federal resources to help American neighborhoods that are under siege by Uzi-wielding drug dealers. The president, focused intently on a problem ten thousand miles away, seemed oblivious to homeless people sleeping in a park across the street from the White House.

The extraordinarily low U.S. casualty figures kept the AVF's composition from becoming a rallying point for anti-war protests. But the administration's deft handling of an international crisis served to accentuate its domestic policy deficiencies. The president summoned both the will and the wallet to put things right in Kuwait. Can he do the same on the home front? ■

Edwin Dorn is a senior staff member with the Brookings Center for Public Policy Education. He is the editor of Who Defends America? Race, Sex and Class in the Armed Forces (Joint Center Press, 1989). He has written articles on defense policy for the Washington Post, the Los Angeles Times, and other newspapers.

THE RIGHT BOOKS AT THE RIGHT TIME

IRAQ

Eastern Flank of the Arab World

Christine Moss Helms

"Christine Moss Helms succinctly and skillfully describes Saddam Hussein's authoritarian regime. The book ably demonstrates that Saddam did not become the 'Beast of Baghdad' overnight." *Washington Post Book World*, September 1990

paper \$10.95

TRAPPINGS OF POWER

Ballistic Missiles in the Third World

Janne E. Nolan

"Masterfully details third world countries' access to high-technology weapons and their proliferation in the world's most dangerous regions. Lays out the dilemmas of controlling the trade in missiles created by overlapping bureaucracies and incompatible policies within the United States and among advanced industrialized countries." Rep. Les Aspin, Chairman, House Armed Services Committee

cloth \$29.95/paper \$10.95

LIVE FROM CAPITOL HILL!

Studies of Congress and the Media

Stephen Hess

A revealing look at how the press covers Congress and how Congress uses the press for its own objectives.

cloth \$22.95/paper \$8.95

PERESTROIKA AND SOVIET NATIONAL SECURITY

Michael McCwire

"McCwire brilliantly and decisively demonstrates that Gorbachev's restructuring of the Soviet military had deep doctrinal roots in the very abandonment of the idea of fighting a nuclear war. The book is must reading for all those who harbor doubts about the radicalness, seriousness or depth of Soviet commitment to the ending of the Cold War." Karen Dawisha, University of Maryland

cloth \$38.95/ paper \$16.95

BROOKINGS AT SEVENTY-FIVE

James Allen Smith

Smith vividly traces the evolution of Washington's oldest think tank.

cloth \$22.95

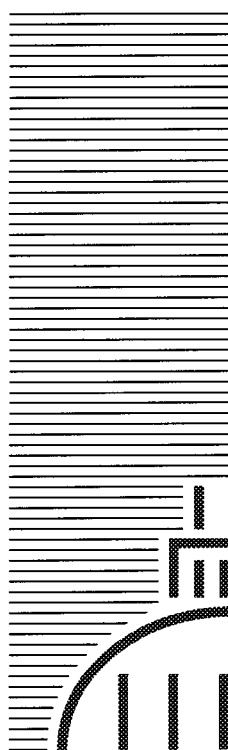
ARMS AND OIL

U.S. Military Strategy and the Persian Gulf

Thomas L. McNaughton

cloth \$29.95/ paper \$10.95

For credit card orders, call toll-free 1-800-275-1447 or (202) 797-6258 in the Washington area. Mail check or money order to: The Brookings Institution, P.O. Box 270, Washington, D.C. 20055.



The Brookings Institution Center for Public Policy Education *International Seminars for Corporate Executives*

A Look Inside Policymaking in Japan

Candid discussions are held with business executives and high-level government leaders to examine new initiatives and directions of Japan's policies and their effect on U.S. business.

Date: May 27-31, 1991

Location: Tokyo, Japan

Beyond 1992: The Changing Face of Europe

Participants meet with senior officials of the European Commission, CEOs of European companies, political officials from the member states of the European Community, and others. Discussions will focus on the specific implications of the provisions for European integration as well as the effect of the changing conditions in Eastern Europe.

Date: June 30-July 5, 1991

Location: Paris, France

Total Quality Management in Japan

U.S. business executives will meet with Japanese business leaders to discover how the Japanese have incorporated Total Quality Management into their companies. Participants will also get a first-hand look at TQM through visits to Japanese companies.

Date: October 12-18, 1991

Location: Tokyo, Nagoya, Osaka, Japan

Korea's Economic Decisionmaking: Prospects for Trade and Investment

Participants will be involved in interactive discussion with senior Korean government officials, business leaders, and analysts of Korean politics and policy.

Date: October 22-25, 1991

Location: Seoul, Korea

For Registration Information

Send in the attached reply card or call Margaret Halstead at (202) 797-6299



★ ★ ★ An Autobiography
Benjamin O. Davis, Jr.
 A · M · E · R · I · C · A · N

★ ★ ★ "A genuine hero who proved by his own example that given an equal chance at education and training, American blacks could be as effective as anybody else."—*New York Times*

★ ★ ★ "Davis is a man whose life was forged on a bedrock of personal character. . . . An American general, and one of the makers of the Air Force."—*Washington Post*

★ ★ ★ "A man with character and fortitude. . . . Davis was America's first black fighter pilot and one of its rare early officers, helping to set the stage for black advancement in the military today."—*Chicago Tribune*

Set against the backdrop of 20th-century America, against the social fabric of segregation and the broad canvas of foreign war, *Benjamin O. Davis, Jr.* tells a compelling story of personal achievement against formidable odds. 55 b&w illustrations. 480 pp. Cloth: 0-87474-742-2 \$19.95

A SPACEFARING NATION

Perspectives on American Space History and Policy

Edited by Martin J. Collins and Sylvia D. Fries

Aerospace historians, political scientists and others explore how America's ventures to new frontiers of flight and space travel have been shaped as much by complex institutional and political dynamics among government, industry, universities and other organizations as by advances in technological capability.

224 pp. Cloth: 0-87474-907-7 \$35.00

SHARING INNOVATION

Global Perspectives on Food, Agriculture and Rural Development

Edited by Neil G. Kotler

Assembling the views of leading scientists, agricultural economists and food policy leaders, this volume examines agricultural strategies and food and nutrition policies in developing nations, the pivotal role of research and technology, and successful innovations that promise advances in global food and agricultural production.

48 tables 194 pp.
 Paper: 0-87474-874-7 \$12.95

NATURE RESERVES

Island Theory and Conservation Practice

Craig L. Shafer

"A remarkable job of synthesizing and analyzing the literature in this urgent subject area."—Jean Matthews, Editor, *Park Science*

As the earth's last remaining preserves of natural habitat are fragmented—by logging, urban development, mining, farming, grazing, and other causes—into islandlike habitat patches, how much longer can they be expected to support viable populations of wildlife? Arguing that guidelines are needed for immediate action, Shafer reviews the literature in island biogeography and related subjects and synthesizes some guidelines from controversial theories.

58 b&w illustrations 208 pp. Cloth: 0-87474-805-4 \$39.95
 Paper: 0-87474-384-2 \$15.95



BREAKTHROUGHS ON HUNGER

A Journalist's Encounter with Global Change

Richard M. Harley

Award-winning journalist Richard M. Harley reveals the side of world hunger that few people see: a quiet revolution of positive change. He presents advances in many fronts, in many nations, with enormous implications for the world's ability to feed itself in the decades ahead, and for those in the West who would help.

15 b&w illustrations 146 pp. Cloth: 1-56098-001-X & \$24.95
 Paper: 1-56098-026-5 \$12.95

Available at fine bookstores

SMITHSONIAN INSTITUTION PRESS

To order by phone, call:
 800/782-4612 • 717/794-2148